



A Descriptive Grammar of Kalinago

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A DESCRIPTIVE GRAMMAR OF KALINAGO

by

Keisha Marie Josephs

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As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Keisha M. Josephs, titled A Descriptive Grammar of Kalinago and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.



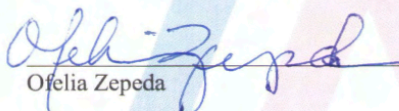
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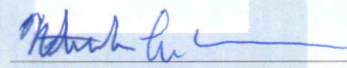


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Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copies of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.



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ARIZONA

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Dedication

To all Kalinago,
past,
present,
and future

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Abstract

This dissertation is a descriptive grammar of Kalinago, a dormant Arawakan language that was spoken in the Caribbean area, primarily the Lesser Antilles. It is closely related to Garifuna a language currently spoken in Central America and Lokono, an endangered language spoken in South America. Chapter 1 provides a historical background of the Kalinago people, as well as an explanation of historical written documentation about the Kalinago language. Chapter 2 uses a historical linguistic approach to determine the phonetic inventory of the language from written documentation and related languages. Through this approach, I determine the existence of an aspiration distinction in stops, a voiceless alveolo-palatal fricative, as well as an aspirated nasal. Chapter 3 describes some of the more common Kalinago morphemes and argues that Kalinago is a middle voice marking language. In Chapter 4, the syntactic features of the language are explained, highlighting a possible VSO sentence structure and the organization of comparative phrases. Finally, Chapter 5 examines the role of linguistics in language revitalization and how it can be applied to revive and revitalize the Kalinago language.

Preface

I was born and raised in New York City, the bulk of which was spent in the Baychester/Eastchester section of the Bronx, a predominantly Afro-Caribbean and Hispanic neighborhood. Both of my parents are immigrants to the United States. My father is Afro-Caribbean from the island of Antigua and my mother is mixed Kalinago and Afro-Caribbean from the island of St. Lucia. I grew up with strong Caribbean traditions in my household, which were further cemented by my classmates and childhood neighbors who were predominantly first-generation Americans. While I didn't grow up in the Kalinago territory or on the island of Dominica, as a child my summers were usually spent in the St. Lucia and Antigua with family.

My mother spoke what she called, “*patois*”, now known as Lesser Antillean French Creole, or Kwéyòl in St. Lucia, and spoke it to me until the time I started kindergarten. I credit this exposure to a second language as the catalyst for my interest in linguistics from a very young age. I continued this interest through college, majoring in Linguistics at Swarthmore college. My classes made me pay closer to attention to my mother's Kwéyòl, and I started to become more interested in the non-French words that occasionally floated through Kwéyòl conversations. My mother talked about part of her family being Kalinago, but I never heard any mention of the Kalinago language itself. I wondered if these words were threads of the Kalinago language. My interest led me to stumble on Douglas Taylor's book *Languages of the West Indies*, and it was there that I was able to get a first real glimpse of Kalinago. My subsequent searches led me towards more documentation, first Fr. Raymond Breton's dictionary, then J.N. Rat's grammar. When I heard there were no more speakers of Kalinago, I knew there was a real possibility of language revival with the documentation I had come across.

Introduction

This dissertation is a descriptive grammar of the Kalinago language, a dormant language that was once spoken in the Caribbean, using historical and comparative analysis using written documentation and related languages. This dissertation is not intended as a complete reconstruction of the language, but instead as a consolidation of multiple sources in order to provide some description of grammatical patterns and to provide a starting point for further reconstruction and language revival. The challenges of working primarily from written documents of great age and related languages cannot be overstated. The written documents are discontinuous, short snapshots of the language within three centuries with a variety of languages, orthographies and data contained within. The other two related languages, Arawak and Central American Garifuna have also been studied very little by linguists, further compounding the task of historical linguistic comparison. However, this consolidation is necessary for future language revitalization work, to provide a stepping stone to understanding the Kalinago language.

In Chapter 1, I provide a brief introduction of the Kalinago people and an explanation of the three main written sources that I use to describe the Kalinago language. In Chapter 2, I describe the possible phonetics of Kalinago using orthographic comparisons and evidence from Garifuna and Arawak. In Chapter 3, I describe noun and verb morphological components and provide an analysis of Kalinago's middle voice, which appears extensively in historical written sources. In Chapter 4, I describe the possible word order of Kalinago, using patterns provided by cross linguistic studies on word order. Finally, Chapter 5 discusses the linguistic environment of the current Kalinago community in Dominica and the next steps that might be taken to revive Kalinago as a spoken language again.

Chapter 1. The Kalinago

1.1 Kalinago history and community

In this dissertation I use the term Kalinago to refer to the contemporary indigenous population in Dominica and to the historical mixed Cariban and Arawakan populations that existed in the Caribbean after European contact. The Kalinago are a small indigenous group residing in the Caribbean, the majority of whom live on the Kalinago Territory on the island of Dominica. The Kalinago territory is located in the eastern side of the island and spans roughly 3,700 acres (Smith 2006). This dissertation will provide a description of the Kalinago language using historical written sources and written sources from languages that are related to Kalinago.

The Kalinago people have been historically referred to as “Carib” by various colonial entities and throughout the academic literature, despite the fact that the Kalinago language is an Arawakan language. Their ethnonym, or the name they used for themselves was *Kalinago* or *Karifuna*. From the earliest colonial contact, labeling Indigenous Kalinago communities as “Caribs” was a political act, an effort to distinguish them from compliant Arawakan communities who were involved in trade with Europeans and who were accepting of Christian doctrine (Boucher 1992). Communities labeled Arawak, despite their actual ethnic makeup, were depicted as peaceful communities, who were terrorized by invading cannibalistic “Caribs” who ate Arawak men and took their women as wives. Though initial European encounters focused primarily on proselytizing and attempts to convert Indigenous Caribbean peoples to Christianity, in 1503, Queen Isabella permitted “cannibals” and Indigenous people who rejected Spanish domination and Christianity to be enslaved. In 1542, this decree was further expanded and called the New Laws, which forbid taking Indigenous Caribbean people as slaves except male “Carib” warriors. In 1569 “Carib” females were included in the exception (Boucher 1992). Thus,

designating various Indigenous Caribbean communities who resisted colonization, regardless of their ethnic makeup, as “Carib” became one strategy to capture Indigenous Caribbean people for slavery, thus freeing up their lands for colonial use. This incorrect term has persisted into modern times and within academic literature causing confusion.

The view that mainland South American Cariban people traveled northward through the Caribbean islands conquering Arawakan people has been called the “Carib invasion” or “Carib conquest” model. It was commonly claimed that Kalinago men and women spoke completely different languages because Carib men killed Arawakan men and captured Arawakan women as wives. This model has come under some criticism, since the linguistic evidence does not seem to agree (Boucher 1992). Though there are some Carib words in Kalinago that were historically used by men, the language remains an Arawakan language (Payne 1994). While men did use some Cariban words instead of Arawakan words, there were no issues with communication between men and women. A Jesuit missionary noted in 1667:

“Although there is some difference between the language of the man and that of the women, as I have said in the chapter on their origin, nevertheless they understand one another. The old men [also] have a jargon when they are dealing with some plan of war, which the young do not understand at all” (Hulme and Whitehead 1992:153)

Additionally, a variety of pidgins were spoken in the Caribbean and coastal South American region, including a mixed Carib and Arawak pidgin that was already in use as a *lingua franca*. Furthermore, there was already frequent contact between Indigenous Caribbean communities and mainland South American Cariban communities before the supposed arrival of Caribs to the region around 1200 C.E. (Whitehead 2002).

Christopher Columbus passed by Dominica on November 3rd, 1493 and although he and his crew did not land, Dominica and surrounding islands began to draw attention from Spain. Thus began centuries of Kalinago resistance to European power, so much so that the Floyd (1973) has termed the separation between the Taino-dominated Greater Antilles and the Kalinago-dominated Lesser Antilles as a “poison arrow curtain”, a virtual political divide between the two regions.

During the 1700s, most of the Kalinago who survived the colonial invasion retreated to 233 acres of the eastern portion of Dominica. This portion, surrounding the town of Salybia, became known as the “Carib Quarter”. In 1860, the land was placed in trust for the Kalinago people and in 1902, Hesketh Bell, Dominica’s administrator at the time, increased the reservation’s area to 3,700 acres (Campbell 2001). On July 4, 1903 the Carib Reserve was made official (Saunders 2005).

Though the Kalinago people now had land for their own use, relationships with non-Kalinago, especially European colonialists, remained tense. One major reason for this tension was the Kalinagos’ unwillingness to act as obedient citizens of the British crown and submit to taxation. On September 19th, 1930, a violent conflict erupted when police invaded the reservation with the intent of seizing contraband, that is, alcohol, tobacco and other items that were imported from neighboring islands without paying taxes. Two Kalinago men died and four were wounded by Dominican police, angering the Kalinago, who staged a violent ambush of policemen. The police retreated, but the following day a warship was dispatched to bombard the territory with flares and intimidate them. As punishment for the resistance, the office of Kalinago chief was dismantled and would not be reinstated until 1952 (Campbell 2001). Today the Kalinago people elect a new chief every five years.

A 2001 census recorded 2,017 Kalinago individuals on the island of Dominica, or 2.9% of the total population of Dominica. In 2011 there were 2,145 individuals living in the Kalinago territory (Population and Housing Census, 2011). However, not every person who lives in the Territory is Kalinago since households may include non-Kalinago spouses and relatives. Additionally, many Kalinago live off the territory in surrounding towns such as Atkinson, Marigot and Castle Bruce. Many Kalinago individuals are mixed race, having intermarried with the local Afro-Dominican population who are the majority ethnic group on the island.

The main source of income for the Kalinago people living within the Kalinago Territory is tourism, followed by agriculture, though many Kalinago also take jobs outside of the territory, especially in Dominica's capitol, Roseau (Layng 1983). The first road through the territory was built in the 1970s and telephone and electricity became available during the 1980s (Saunders 2005). In 2012, high-speed Internet became available in a few parts of the territory. In February 2015, the name used to refer to the people was officially changed to Kalinago from Carib, though the term Carib is still in use, especially among older residents.

1.2 The Kalinago language

Kalinago is an Arawakan language belonging to the Arawakan family. It was Douglas Taylor, a linguist specializing in Kalinago and Garifuna, who was among the first to place it within the Arawakan language family after completing a comparison of its morphological and phonological characteristics (Taylor 1977a). It was also Taylor (1977) who noted that Kalinago shared many characteristics with Garifuna, an Arawakan language that used to be spoken in St. Vincent and is now spoken in South America.

As a language family, Arawakan is the most widely expansive in South America, geographically stretching from Central America to Paraguay (Payne 1990). It is also was once the most extensive, comprising 154 languages if extinct languages are included (Loukotka 1968). Only 40 Arawakan languages survive today (Aikhenvald 1999). A recent Bayesian model using Arawakan cognates places Kalinago within the Circum-Caribbean branch of Arawakan languages along with Taino, Wayuu, Lokono, Garifuna and Añu as sibling languages (Walker and Ribeiro 2011). Of these only Wayuu, Lokono and Garifuna, and Añu are still spoken currently, and among them, all are endangered except for Wayuu.

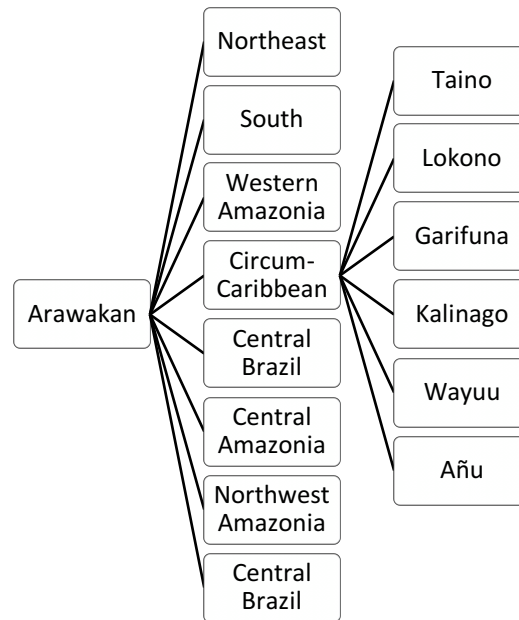


Fig.1 Circum-Caribbean branch of the Arawakan language family (Walker and Ribeiro 2011).

The last fluent speaker of Kalinago is said to have been Ma Gustave, who passed away during the 1920s, however many community members have personally told me of late relatives who were speakers well into the 1990s. On my most recent trip to the Kalinago Territory, I was able to hear some Kalinago spoken by an elder male who claims to still use some words and

phrases with friends he goes fishing with. Regardless, the language can be said to be dormant: no one speaks it fluently and no new speakers are being created.

With the absence of an Indigenous language, the community shifted to Lesser Antillean French Creole, or Kwéyòl, as a marker of indigenous identity (Hudepohl 2008). In the current sociolinguistic climate, most Kalinago speakers in Dominica are bilingual in English, which is the national language of Dominica, and French Creole. English is the dominant language in daily use. Sporadic efforts have been made to revive the language which will be explained further in Chapter 5.

1.3 Sources of language material

1.3.1 Fr. Raymond Breton (1665)

Father Raymond Breton was a French priest who lived among the Kalinago on the island of Dominica during the 1600s. His main objective was to convert the Kalinago to Christianity, and to do so he tasked himself with learning their language. During his stay he published a Kalinago-French dictionary with roughly 3,500 entries that contained not only words, but phrases, sentences and cultural information. He also published a French-Kalinago dictionary, a small grammar of the language, and a catechism. His work is significant in that it was the first recorded information about the Kalinago language. Breton's work also provides us with the first written orthography which he based off of the French orthography of the time. His orthography is not consistent and his intentions are not transparent, however what he lacks in orthography he makes up with the extensive entries, notes, and cultural information that he wrote down. In this dissertation all references to Breton refer to the reprinted 1997 edition of the dictionary unless

otherwise stated. Additionally, all examples are taken from his dictionary unless otherwise stated.

1.3.2 Joseph Numa Rat (1898)

Joseph Numa Rat was a physician of French ancestry who resided on the island of Dominica in the late 1800s. Though not a trained linguist, his work is important because it represents the first formal grammar written in English on the Kalinago language. Though lacking in wordlists, his grammar contains verb paradigms as well as four short Kalinago narratives which serve as an excellent resource in analyzing the language's syntax. Additionally, his orthography uses a mostly one-to-one mapping between symbol and sound, with Roman letters being similar to their equivalents in English making it is easy to comprehend to a speaker of English. Because of this his work is also an important link in understanding the sounds written by Breton. All examples in this dissertation that mention Rat refer to his 1898 grammar.

1.3.3 Douglas MacRae Taylor (1935)

Of all the sources, the works of Douglas Taylor are the most reliable linguistically. Taylor was British with a degree in Modern Languages from Cambridge University. His earliest work in the Kalinago territory began in 1935 when he recorded roughly 50 words and phrases of the Kalinago language that were still in use on the island of Dominica including a song. He returned to Dominica in 1936 again refining the notes and the words and phrases he recorded the previous years. He also recorded copious anthropological information about the Kalinago territory in Dominica. His later work however focused primarily on Garifuna, which he considered to be a dialect of Kalinago (Christie n.d.) I discuss Kalinago's relationship to the

Garifuna language in section 1.3.4 In my work, all examples referencing Taylor refer to his 1936 source unless otherwise specified.

1.3.4 Central American Garifuna

Garifuna is a language closely related to Kalinago that was originally spoken on the island of St. Vincent but is now spoken in the Central American countries of Belize, Honduras, Nicaragua and Guatemala by roughly 100,000 people. The story of the Garifuna and how they came to live as a cultural and linguistic group in Central America is a complicated one. Oral histories and traditional historical retellings state that sometime during the 1700s, a ship filled with African slaves wrecked on the coast of St. Vincent, an island in the Caribbean (Taylor 2012). The survivors escaped and were absorbed into the indigenous American Indian population (called Caribs at that time) that were on St. Vincent (Taylor 2012). (It is not known whether the people called themselves Garinagu before then or if they were still Kalinago at that time.)

During various conflicts and revolts with colonial powers (specifically the English) the revolting population on St. Vincent grew. The original Indigenous population of St. Vincent and other islands gained population from escaped slaves from other islands who adopted St. Vincent's Indigenous culture and language and intermarried with its Indigenous people. Together they led a failed revolt against the British who considered the 'Black Caribs', the Garifuna who were either non-mixed African or mixed-African, the main agitators. Because of this, the British captured roughly 5,000 Garifuna and held them on the island of Balliceaux, a small island off the coast of St. Vincent from July 1796 to February 1797. In March of 1797, the survivors were deported to Roatan, a small island off the coast of Honduras where they were essentially abandoned (Palacio 2005).

Left to their own devices, surprisingly the Garifuna flourished in Central America simultaneously maintaining their culture and language while braving and expanding into unfamiliar Central American territory. It is because of this history that Garifuna remains an important link in the understanding of the Kalinago language. The language of St. Vincent at the time of the first shipwreck was at least a dialect of if not the same language that was spoken on islands like Dominica. Rat (1898) noted that at the time of his writing, people in Dominica stated that the while the Garifuna in St. Vincent had different speech, there was no problem in intelligibility between the two.

Modern Garifuna has most certainly changed from 1700s, however the modern language materials produced today by the Garifuna people are enormously helpful to the revitalization of Kalinago. In this paper, my primary source of Garifuna examples and cognates is the 2006 Garifuna dictionary *Hererun Wagüchagü* by Fernando Sabio and Alina Ordoñez unless stated otherwise.

1.3.5 Lokono (Arawak)

The Lokono¹ language is spoken in South America in the countries of Venezuela, Suriname, Guyana and French Guiana. Oral history states that Lokono nation was made up of six clans, one of that being the Karifuna (Cassava Clan) which referred to the Kalinago people (Fredericks 2006: p.c.). It is not surprising then that the Lokono and Kalinago language share many elements and is also an important link into understanding the changes that took place in Kalinago phonology.

¹ also called Arawak in academic literature

The sources that I use for Lokono are two written sources from William Pet's 1979 paper and 1990 dissertation (which represent the only two modern academic works on the Lokono language to date) and the 1994 Lokono dictionary written by Lokono priest J.P. Bennett. All the examples from Lokono come from Bennett's 1994 dictionary unless stated otherwise.

In the following section I will examine the orthography of Kalinago and use it to propose a phonemic inventory for the language.

Chapter 2. Phonology

In this section I attempt to derive phonemes of the Kalinago language by comparing orthography across the three main written Kalinago sources, Breton, Rat and Taylor and comparing Lokono and Garifuna with Kalinago. Examples are given in their orthographic form, followed by a proposed phonemic form or proposed underlying within slashes, //, and a gloss.

2.1 Syllable structure

The basic syllable structure of Kalinago is maximally (C)V. However monosyllabic words are very rare, as are words that are solely VV.

- (1) ²*su* ‘all’
- (2) *pe.na* ‘door’
- (3) *i. ri* ‘name’
- (4) *pa.ki.nu.mu.tu.ri* ‘your stubbornness’

There are some instances in which Breton writes orthographic consonant clusters, however these clusters most likely occur from the shortening or elision of a vowel in fast speech. Evidence from this comes from the few entries Breton wrote in which he gives a form variably with and without consonant clusters in the same entry.

- (5) ³*órole, orle*, roots.
- (6) *Krékrégouta nóarou*, ‘I made her chew’
- (7) *Kakêreúрати, makêrécati*, ‘he chews very hard’, ‘he doesn’t chew’

Looking at the orthography it seems in the vast majority of the cases, the vowel that is shortened is either preceding or following a liquid consonant.

² These forms are in a phonemic transcription that will be developed throughout the chapter.

³ In examples (5), (6), and (7) I have preserved Breton’s original orthography in order to examine the variable consonant clusters

2.2 Stress

Unfortunately, stress cannot be determined from the sources. Breton uses accent marks to denote vowel quality and says there are three “accents”, one being long, the other being sharp and the last being more grave than sharp. However, though he describes three “accents” he only uses two accent marks: the standard acute and grave accents. Furthermore, he does not use them consistently. For example, he notes that words ending in *áim* have long and acute vowels, but gives *nàim*, and *nyàim* as his examples which contain grave accent marks (Breton & Besada 1997). Stress in the related languages, Garifuna and Lokono has also not been analyzed and explained, so I am unable to use these languages to decipher what Kalinago stress might be. Other dormant languages, such as Mutsun, have experienced a similar problem, where information about stress patterns were not clear enough to support teaching a possible stress pattern (Warner, Butler, & Luna-Costillas 2006), (Warner, p.c).

2.3 Consonants

Because of the different orthographies used across the sources, I have created a table designed to match the phoneme with the equivalent orthographic letters in each of the written sources. Within each section I will discuss each proposed phoneme and I determined them using their orthographic representation and equivalents in related languages.

PHONEME	Breton orthography	Rat orthography	Taylor orthography
/p/	p, b	p, b	p, b
/t/	t, tt, d	t	t
/k/	k, g, c	k	k
/m/	m	m	m
/n/	n	n	n
/ɲ/	nh (middle of words only), gn, ny, nV		
/n ^h /	nh	nh	nh
/r/	r, l, ll	r	r
/l/	l, ll	l	l
/f/	pf, p	f	f
/ç/	ch, s, sc, ci	s	ç
/x/	c	ch	kh
/h/	h, ø	h	h
/j/	iV, y	y	y
/w/	oV, ouV, oüV, huV, hüV		
/a/	a	a	a
/e/	e	e	e
/i/	i	i	i
/u/	o, u	o, u	o. u
/ɛ/	eu, ê	ũ	ê

Table 1. Phonemes and their orthographic correspondences

Based on comparisons among the different historical orthographies, I propose that Kalinago has 15 consonants and 6 vowels. Stop consonants are /p/, /t/, and /k/. Nasal consonants are /m/, /n/ and /ɲ/. There is one tap /r/ and three fricatives /f/, /x/, /h/, and /ç/. It has three approximants /j/, /w/, and /l/. There is also one aspirated nasal /n^h/, discussed further below.

2.3.1 Unaspirated voiceless bilabial stop /p/

Determining whether /p/ and /b/ are both distinctive in Kalinago is difficult. Breton used both *p* or *b* in his writings yet sometimes seems to get them confused. For example, he writes *píani* ‘your wife’, where in other instances he writes *bíani*. Additionally, Taylor remarks ‘p, k, and t are softened so as to become confused with b, g, and d.’ (Taylor 1936:465) The remarks by Taylor indicates that there was most likely an unaspirated stop that was realized as either /p/ or /b/.

In Breton’s dictionary the use of orthographic *p* is not widespread. Orthographic *b* is much more common and widespread and *p* tends to show up in the beginning of words.

- | | | |
|------|--|--|
| (8) | <i>piani, bíani</i> /pijani/ ‘your wife’ | (Garifuna <i>biani</i> ⁴) |
| (9) | <i>paioti</i> /paoti/ ‘it is fragile’ | (Garifuna <i>bóubouti</i>) |
| (10) | <i>aba</i> /apa/ ‘one’ | (Garifuna <i>aba</i> , Lokono <i>aba</i>) |
| (11) | <i>ballichi</i> /paliei/ ‘ashes’ | (Garifuna <i>baligi</i> , Lokono <i>balisi</i>) |

Breton was a native French speaker, and Taylor was a native English speaker, which account for this confusion two languages in which voicing or voice onset times in stops determine distinction (Laeufer 1996). If /p/, or even the stops /t/ and /k/ discussed in the following sections had a shorter voice onset time it could be perceived as /b/, /d/ and /g/ by both Taylor and Breton due to their native languages.

⁴ This way of saying ‘your wife’ is now archaic in Garifuna. It’s modern meaning means ‘your pet.’ (Taylor 1977a)

2.3.2 Voiceless alveolar stop /t/

Kalinago has one alveolar stop which was voiceless and probably unaspirated given Taylor's comments about its confusion with *d* (Taylor 1977a). Additionally, while the majority of instances Breton uses the letters *t* and *tt* for this sound.

- | | | |
|------|---|-----------------------------------|
| (12) | <i>ritta</i> /rita/ 'drinking gourd' | (Lokono <i>dita</i>) |
| (13) | <i>agoutta</i> /akuta/ 'sea foam' | |
| (14) | <i>teútêti</i> /tititi/ 'it is wet' | (Garifuna <i>düdüti</i> /diditi/) |
| (15) | <i>tóna</i> /tuna/ 'river, water' | (Garifuna <i>duna</i>) |
| (16) | <i>erébeteki</i> /erepeteki/ | (a type of small duck) |
| (17) | <i>boüitouti</i> /puwituti/ 'he is beautiful' | (Garifuna <i>buidu</i>) |

In some instances, Breton also uses letter *d* but only in four entries under the dictionary section for the letter D. For this letter he writes, "that is all that I have found with *d* and in reality it is possible that it doesn't exist and that they say *timíttira*⁵, *oüalatli*, where I have written *oüaladli*." (Breton & Besada 1997:96)

2.3.3 Voiceless velar stop /k/

Breton writes /k/ with the letters *k* and *c*, and occasionally the letter *g*. This sound is most likely an unaspirated velar stop. Evidence for this, as with the other places of articulation, comes from the fact that Breton at times writes a word with a *k* in one instance and with a *g* in another. Furthermore, Taylor, a native English speaker, notes that in his elicitation, he often confused *k* with *g*. Additionally, items that Breton writes with *g* often appear with *k* in Rat's grammar. All this points to the conclusion that when a word was written with *k* or *g* it referred to an unaspirated /k/.

⁵ In a previous entry he gives "*Dimíttira*, it is a grass whose leaves cut you if you are not careful."

- (18) *kéoiie* /kewe/ ‘hook’ (Garifuna *güwi*)
 (19) *-⁶óka* /uka/ generalization suffix (Garifuna *-uga*)
 (20) *-kêta* /kita/ causative suffix (Garifuna *güda* /gida/, Lokono *kota*)
 (21) *ougoutti* /ukuti/ ‘foot’ (Garifuna *ugudi*, Lokono *kuti*)
 (22) *-gle* /kile/ instrumental suffix (Garifuna *-güle*)

The sounds in words with orthographic *c* are much harder to determine, since Breton also used *c* to refer to a voiceless velar fricative /x/ discussed in 4.3.2. The only way to determine the sound is to examine the correspondences in Lokono and Garifuna words. Items with a true unaspirated /k/ in Kalinago will appear as /k/ in Lokono and /g/ in Central American Garifuna.

- (23) *cari-* /kari/ ‘painful’ (Garifuna *gari-*, Lokono *kari-*)
 (24) *itica* /itika/ ‘excrement’ (Garifuna *ídigaü* /idigai/, Lokono *itika*)
 (25) *aíca* /aika/ ‘to eat’ (Garifuna *eiga*, Lokono *eka*)
 (26) *ácaoüa* /akawa/ ‘to bathe’ (Garifuna *ágawa*, Lokono *aká*)

2.4 Nasals

Kalinago has four nasal consonants, /m/ and /n/, which are indicated in all three sources with the letters *m* and *n* unambiguously. Breton also uses these letters to indicate nasalization on vowels but it is clear when he does so (discussed in Section 5.2) It has one palatal velar /ɲ/ and one breathy nasal /n^h/.

⁶ The hyphen here indicates a morpheme boundary

2.4.1 Bilabial nasal /m/

As stated before the status of /m/ is unambiguous and there is no reason to dispute its existence in the inventory. It appears word-initially and word-medially and is relatively common throughout the sources.

- (27) *mecou* /meku/ ‘monkey’ (Garifuna *megu*)
- (28) *mibi* /mipi/ ‘vine’ (Garifuna *mibi*)
- (29) *méchou* /meeu/ ‘cat’ (from Spanish *miccho*)
- (30) *wayámaka* /wajamaka/ ‘lizard’
- (31) *emeléhuerou* /emeleweru/ ‘swallow (bird)’

2.4.2 Alveolar nasal /n/

Similar to /m/, alveolar nasal /n/ also appears the same word-initially and word-medially in all the sources and related languages.

- (32) *narou* /naru/ ‘root of the Naru grass’
- (33) *nichinali* /nicinari/ ‘my flute’
- (34) *nonum* /nonũ/ ‘moon, dirt’

2.4.3 Palatal velar /ɲ/

Breton represents a voiced palatal nasal /ɲ/ with *nh* in the middle of words, *gn* and the sequence *ny*. Breton was following French orthographic conventions when using *gn*.

- (35) *iróogne* /irujne/ ‘dew’
- (36) *eteignon* /eteijnũ/ ‘daughter in law’ (Garifuna *ídiñu*)
- (37) *agnántacoüa*, *aniántacoüa* /aɲãtakuwa/ ‘to knead’ (Garifuna *añoundagua*)

But for the sequences *nh* and *ny*, These conventions are only made clear when we compare them to the Garifuna equivalents.

- (38) *chinhaca* /ɕɪɲaka/ ‘to joke or make fun of’ (Garifuna *siñagei*)
 (39) *sanyanti* /ɕaɲãti/– ‘it is not possible’ (Garifuna *siñá* ‘it can’t be’)
 (40) *monha, monya* /moɲa/ ‘earth’ (Garifuna *muya*)

The previous sequences (*nh*, *gn*, and *ny*) only occur word medially, but there is also a chance that Breton might have written this sound as *niV* in the beginning of words, V being any vowel. For example, he writes *niðim* ‘there.’ This word also shows up in Garifuna as *ñein* /ɲeĩ/, however Rat recorded it both as *yanhi* /yãhi/ and *yáhi* /yahi/. In Lokono, the word is given as *jon* /jõ/. Therefore, it is unclear whether this sound did appear word initially or if it was merely assimilation of a nasal feature in this case. Garifuna has other words in which /ɲ/ appears word initially, and Breton gives other words spelled *niV*, for which four cognates can be found in Garifuna:

- (41) *nioucoule* /ɲukule/ ‘ticklish’ (Garifuna *ñuguleti* (m.), *ñuguletu* (f.))
 (42) *nioúcouí* /ɲukuti/ ‘itchy’ (Garifuna *ñuguti*)
 (43) *nioulouí* /ɲuluti/ ‘soft’ (Garifuna *ñuluti*)
 (44) *Niouroucóati* /ɲurukuwati/ ‘he is seated’ (Garifuna *ñurú* ‘to sit’)

While this may seem like a small number, the Garifuna dictionary itself only lists 43 entries beginning with this sound. When one collapses entries with similar meanings such as the masculine or feminine forms of a word, or synonyms, the number of entries further reduces to only 20 with the majority of the entries involving the word *ñein* ‘there.’ It would seem then that the appearance of /ɲ/ word initially is rare even in Garifuna, and that most entries that Breton writes with *niV* word-initially are probably not words that begin with /ɲ/.

2.4.4 Voiceless nasal /n^h/

Kalinago has a voiceless nasal /n^h/ which Breton writes with the sequence *nh*. This sound also appears in the works of Rat and Taylor, who write it in the same way as Breton, *nh*.

- (45) *nh-* /n^h/ 3rd person plural (Garifuna *ha-*, Lokono *n-*)
- (46) *nhara* /n^hara/ ‘those’ (Garifuna *hara*)
- (47) *nhinricoüa* /n^hirikuwa/ ‘they accuse’
- (48) *nhoaria* /n^huwariya/ ‘from them’
- (49) *nhemére* /n^hemere/ ‘their custom’
- (50) *nheréite* /n^hereite/ ‘their captain’

Although Breton does not describe the sound, both Rat and Taylor do. Rat says “the *n*, is pronounced as far as it can be, before the *h* which is aspirated.” (1898:293). In his 1936 paper, Taylor describes *n* as ‘sometimes’ aspirated, but in later publications terms it an ‘aspirated nasal’ (Taylor 1977a:34). Rather than an ‘aspirated’ nasal, Rat’s articulatory description of an initial nasal followed by an aspirated glottal fricative is similar to descriptions of a ‘voiceless nasal’ that occurs in languages such as Hakha Chin (Hoffman 2018).

This sound has a very restricted distribution in Kalinago, only appearing at the beginning of words and specifically, words that begin with the 3rd person plural prefix *nh-*. This sound is also not found in any other Caribbean Arawakan language, however according to Payne 1985, Resígaro, an Arawakan language spoken in Northern Peru, contains a voiceless nasal that has resulted from a proto /*CVhV/ sequence. It seems a similar phenomenon has occurred in a Kalinago, where the aspirated nasal is from a reduction of an /nVhV/ sequence that occurred in the 3rd person plural prefix. We can see this in (45) above where Kalinago has /n^h/ for the 3rd person plural prefix, Garifuna has [ha] and Lokono has [n]. Each language has deployed a varying strategy for reduction in an /nVhV/ sequence in the 3rd person plural prefix. That this

sound was documented as late as 1936 indicates that though restricted distributionally, /n^h/ had become a phoneme of Kalinago.

2.5 Fricatives

Kalinago has four fricatives /f, /ɸ/, /x/ and /h/. This inventory of fricatives is typologically unusual initially but with the inclusion of [s] as a variant for /ɸ/ it becomes less unusual. In this section, I discuss how I came to this conclusion of this series of fricatives, using orthography, comments from Breton, and Lokono and Garifuna.

2.5.1 Voiceless bilabial fricative /f/

Breton does not use the letter *f* for this sound and instead writes underneath the **F** entry:

*“I found no f in the [Kalinago]⁷ language, I think they mistake it with the **p**, because when we say: **fi!** ‘that is ugly’, they say, **pfi**, which is neither our **f**, nor the **phi** of the Greeks in pronunciation, but much rougher, because they push and stop their tongue against their lower teeth /and/ close their lips to form the **p** then reopen them immediately as if they were blowing and form the **f**.” (Breton & Besada 1997:115)*

Breton’s articulatory description of a stop followed by a fricative means that this sound could possibly be an affricate /pf/ (Lin 2011). In fact, this particular sound Breton writes as *pf*, however not often, and most words written with this sound pertain to blowing air through the lips.

- (51) *Apfoúraco níem* /afuraku/ ‘I am blowing something’
- (52) *ápfourouti* /afuruti/ ‘out of breath’
- (53) *ballípfi bebeite kay* /balifeti/ ‘the wind is strong and rough’

⁷ Breton originally used the term *Caraíbe*, or Carib, though he was referring to Kalinago. I’ve used the word Kalinago to avoid confusion with the South American Carib language.

It also appears in loanwords with /f/:

(54) ⁸*Pfrancê* ‘France’

(55) *allopfoler* ‘needle’ (from Spanish *alfiler*).

However, one only has to look at the Kalinago clan name of the *Karifuna*, recorded by Rat in his 1898 grammar to see that at least by the 1800s, Kalinago did have an [ff]. Rat (1898) also record two other words with [ff].

(56) *kaifutetina* ‘I have fear.’

(57) *irífuti* ‘It is good.’ (Breton *iropoti*, Garifuna *irufudi*) (Rat 1898)

It’s also possible that this /f/ emerged from an earlier aspirated /p^h/ In modern Garifuna and Lokono a similar phenomenon occurs. For example, the color ‘red ’in Breton’s dictionary is *pona-*, while in Garifuna it is *funa-*. This occurs in other words as well such as Kalinago *chipeti* /çipeti/ ‘bitter’ which corresponds to Garifuna *gifti*, and Lokono *shife*. Also, Breton in 1665 records *ápara* ‘to beat or kill’, which corresponds to Garifuna *afara*, and Lokono *fara*. In all these cases it is Breton’s *p* and not only his *pf* that corresponds to modern day /f/. Breton’s description aligns closely with an affricate and he also makes clear that it was not a bilabial fricative. Regardless of it’s affricate origins, by the time of Rat’s writing in 1898, it’s clear that /f/ was present in the language.

2.5.2 Voiceless alveolo-palatal fricative /ç/

In the dictionary, Breton orthographically represented this sound variably as *ch*, *s*, or *c* (in front of a high front vowel) and in one instance *sc*.

⁸ Phonemic transcriptions have not been given for these examples, since it is not clear what strategy Kalinago would take to handle syllable final consonant sounds and consonant clusters from foreign words.

- | | | |
|------|--------------------------------------|----------------------------------|
| (58) | <i>ichánoucou</i> /iɛanuku/ ‘mother’ | (Garifuna ‘biological children’) |
| (59) | <i>sáccao</i> /sakau/ ‘sand’ | (Garifuna <i>sagoun</i>) |
| (60) | <i>árici</i> /hariei/ ‘after’ | (Garifuna <i>harigi</i>) |
| (61) | <i>scierra</i> /ɕiera/ ‘saw’ | (from Spanish <i>sierra</i>) |

It seems that Breton was inclined to think of this sound as either an /s/ or a /ʃ/. He writes in one entry:

“Siólnliti siónlicoüati, it is twisted, it is tangled; Some pronounce all the words that start with s like ch, the rest pronounce like s or c but very few, it’s use will be observed.”
(Breton & Besada 1997:221)

In this entry Breton indicates that most people pronounced an /ʃ/-like sound, which he writes as “ch”, while a minority pronounced it like /s/. Taylor also mentions this sound and describes it as being “intermediate” between /s/ and /ʃ/ (Taylor 1936:465). Being that Taylor, who was experienced in multiple languages, described it as not being /s/ or /ʃ/, the only sound that comes close to what Breton and Taylor describe is /ɕ/.

2.5.3 Voiceless velar fricative /x/

Looking at the solely the dictionary, it is not apparent that this sound exists. However, both Rat and Taylor make mention of it, both describing it as similar to the ‘ch’ in the Scottish word *loch* ‘lake’ (which can be assumed to be a velar fricative). Unfortunately, Rat records no words with this sound and Taylor only records *kômulàkha* /komulaxa/ ‘to smoke’, with the sequence of letters *kh* denoting the sound /x/ according to his description of his orthography.

This word can also be found in the Breton dictionary in the entry *acomólacoüia liem lichirocoucheem*, ‘he blows the smoke back through his nose.’

Drawing similarities between the two words in order to determine the sounds requires morphological explanation. In the dictionary entry, the word *acomólacoüia* is the reflexive form of the verb ‘to smoke’ that Taylor gives. Most verbs contain a stem, surrounded by a verbal prefix *a-* (which is often dropped) and an infinitivizer ending which in Taylor’s entry is *-kha*. For regular verbs such as this one, the reflexive is formed by infixing the reflexive morpheme *-ua* inside the infinitivizer of the verb which is in this case *kha*. Using Taylor’s entry this would form a word like *kômulàkhua*. Comparing *kômulàkhua* /komulaxua/ to the dictionary entry *acomólacoüia* we can see that the infinitivizer *kha* in this case would be probably be spelled *ca* in Breton’s dictionary and would probably be pronounced /akomolaxa/, similar to what Taylor recorded.

This leads to the suspicion that Breton might be writing /x/ as *c*. Comparing words across Garifuna and Lokono we can see another correspondence. While some words that Breton writes with *c* appear as *g* in Garifuna and *k* in Lokono, other words that he writes with *c* appear orthographically as *h* in Garifuna and orthographically as *kh* in Lokono (described as a highly aspirated /k/ in Pet (1979)). The only way to confirm this sound is by comparing words across Lokono and Garifuna.

- | | | |
|------|---------------------------------|--|
| (62) | <i>acomolacoüia, kômulàkhua</i> | ‘to smoke’ (Garifuna <i>agumulaha</i>) |
| (63) | <i>iouloüca</i> /hijuruxa/ | ‘to spit’ (Garifuna <i>hiúruha</i>) |
| (64) | <i>aríca</i> /arixa/ | ‘to see’ (Garifuna <i>àriha</i> , Arwak <i>adukha</i>) |
| (65) | <i>oucabo</i> /uxabu/ | ‘hand’ (Garifuna <i>úhabu</i> , Lokono <i>khabo</i>) |
| (66) | <i>cáyaba</i> /xajaba/ | ‘flea’ (Garifuna <i>hayaba</i> , Lokono <i>khayaba</i>) |

Although neither of the sounds in the related languages are exactly /x/, they form a regular correspondence and are sounds that are similar. It's possible the proto-language had k^h which morphed into /x/ in Kalinago and /h/ in Garifuna, while remaining k^h in Lokono. Payne (1990:440) provides some evidence for this, claiming that proto-Arawakan had $*k^h$, which is realized as /h/ in Garifuna and remains k^h in Lokono. The table below shows Proto-Arawakan forms with their forms in Lokono, Garifuna and Kalinago.

	Proto Arawakan	Lokono	Garifuna	Kalinago
ant	$*k^h a\check{s}i$	$k^h asi$	<i>hai</i>	<i>haguě</i> /xaki/
flea	$*k^h ayapa$	$k^h ayaba$	<i>haiaba</i>	<i>cayaba</i> /xayapa/
hand	$*k^h ap\check{i}$	$k^h abo$	<i>habu</i>	<i>oucabo</i> /uxabu/

For the word “ant”, although Breton writes “*haguě*”, he explains “The g of this word is pronounced in the throat and not quite like g, but I do not know how to write it any other way.” From his confusion in trying to write whatever sound that is represented by ‘g’ in this word, it's possible that this form might be /haxi/ instead of /xaki/.

2.5.4 Voiceless glottal fricative /h/

Kalinago has a voiceless glottal fricative, which is indicated by the letter *h* in all three sources.

- (67) *hoüa* /huwa/ ‘frog’ (Garifuna *húa*)
- (68) *hámarabáe* /hamarapae/ ‘walk slowly!’ (Garifuna *hámaru-* ‘slow’)
- (69) *há mouca* /hamuka/ ‘to want’ (Garifuna *hamuga*)
- (70) *hilara* /hilara/ ‘to die’ (Garifuna *hilá*)
- (71) *ocohátina* /ukuhatina/ ‘I yawn’
- (72) *-ha* /ha/ past perfective morpheme (Garifuna *-ha*)

The only note given about this sound is in Rat's grammar who describes it as "always aspirated." (1898: 293) which demonstrates that this sound was unequivocally /h/.

There are some instances in the dictionary where Breton omits the letter *h* but this omission can only be seen when comparing words to later sources and related languages

- (73) *ínharou* (hiparu/‘woman’ (Garifuna *hiñaru* ‘woman’, Lokono *hiaro*)
- (74) *áburi-* /hapuri/ ‘shy’ (Garifuna *haburi*, Lokono *haburi*)
- (75) *ibichet* /hipice/ ‘sifter’ (Garifuna *hibise*)
- (76) *íta* /hita/ ‘blood’ (Garifuna *hitaii*, Lokono *uthu* /ut^hu/)
- (77) *oya* /huya/ ‘rain’ (Garifuna *huya*)
- (78) *oualouoíyourou* /waluhuyuru/ (1665), iwàyuhurù (Taylor 1936) ‘thunder’
(Garifuna *wayuhururu*)
- (79) *árici* /harici/ ‘after’ (Garifuna *harigi* /harigi/)

This is most likely due to his French-speaking background, which overwhelmingly does not pronounce /h/ word initially.

2.6 Liquids

While upon first glance at the dictionary it might seem as though orthographic *l* and orthographic *r* represent different sounds. However, there are cases in which Breton's uses a third letter sequence, *ll*. In Breton's dictionary, orthographic *l* and *ll* tend to correspond to /r/ in Lokono and Garifuna. However, Taylor also notes that he found *l* and *r* confusing (Rat makes no mention of any difficulty). This presents some difficulty in interpreting which liquid sounds orthographic *l* and *ll* represent in the dictionary. In section 2.6.2, I discuss a possible reason for this confusion.

2.6.1 Voiced lateral approximant /l/

Kalinago has one alveolar lateral approximant /l/ which Breton writes as orthographic *l* and *ll* in the dictionary.

- | | | |
|------|--|--|
| (80) | <i>hala</i> /hala/ ‘chair’ | (Garifuna <i>hala</i> , Lokono <i>hala</i>) |
| (81) | <i>iláku</i> /ilaku/ ‘person’ | (Lokono <i>loko</i>) |
| (82) | <i>iligini</i> /ilikini/ ‘pet’ | (Garifuna <i>ilügüni</i> , Lokono <i>likinihi</i>) |
| (83) | <i>likiya</i> /likiya/ ‘he’ | (Garifuna <i>luguya</i>) |
| (84) | <i>balíchi</i> /paliei/ | (Garifuna <i>baligi</i> /baligi/, Lokono <i>balisi</i>) |
| (85) | <i>alleiba</i> /areipa/ ‘cassava cake’ | (Garifuna <i>ereba</i>) |

However, the interpretation of *ll* is not always so clear as one can see in the next section.

2.6.2 Voiced alveolar tap /r/

Kalinago also has an alveolar tap /r/ which Breton represents variably with orthographic *r*, *l*, as well *ll*.

- | | | |
|------|---|---|
| (86) | <i>rárama</i> /rarama/ ‘to stand’ | (Garifuna <i>rarama</i> , Lokono <i>jinama</i>) |
| (87) | <i>iri</i> /iri/ ‘name’ | (Garifuna <i>iri</i> , Lokono <i>iri</i>) |
| (88) | <i>íchiri</i> /iɛiri/ | (Garifuna <i>igiri</i> , Lokono <i>shiri</i>) |
| (89) | <i>cálah</i> /karau/ ‘grass’ | (Lokono <i>karau</i>) |
| (90) | <i>caláoiäou</i> /karawau/ ‘drum’ | (Garifuna <i>garawoun</i>) |
| (91) | <i>balànna</i> /barana/ ‘sea, ocean’ | (Garifuna <i>barawa</i> , Lokono <i>bara</i>) |
| (92) | <i>amanlle</i> /amäre/ | (Garifuna <i>amuru</i>) |
| (93) | <i>calállla-átina</i> /kararatina/ ‘I turn’ | (Garifuna <i>agararaha</i> ‘to spin, twirl around’) |

With orthographic *l* and *ll* being both used for /r/, determining exactly which sound Breton intends is almost impossible without comparing the words to Lokono and Garifuna. But the question is why does Breton (and Taylor (1936) who also noticed some confusion) confuse these two sounds? The answer might lie in Lokono.

In his 1979 dissertation on Lokono, Pet noticed that older Lokono speakers had a third liquid sound, which he calls an apical retroflex flap, in modern IPA /ɽ/. While this sound was being lost in the younger generations, older Lokono speakers insisted that this sound was different from /r/, and every speaker that used /ɽ/ used it consistently and in the same words. For example, older speakers who used both /r/ and /ɽ/ had the minimal pair /hororo/ ‘swampy’ and

/hoɾoɾo/ ‘cloud.’ Although Pet (1979) gives no other minimal pairs he does give a list of words in which these speakers also have /ɾ/. Three of the words on this list appear to have equivalents in Breton’s dictionary. In the following examples the Lokono word appears on the left and the Kalinago word written in Breton’s orthography is on the right:

- | | | |
|------|-----------------------|---------------------------------|
| (94) | /ʔùɾiróka/ ‘at night’ | Kalinago <i>ouli</i> ‘black’ |
| (95) | /haɾíra/ ‘white’ | Kalinago <i>allouti</i> ‘white’ |
| (96) | /bàɾa/ ‘sea’ | Kalinago <i>balàнна</i> ‘sea’ |

Kalinago might have had three distinct lateral and rhotic consonants through the last generation fluent speakers. Orthographic *l* and *ll* in Breton’s dictionary is his way of marking an /ɾ/ vs /r/ distinction in the dictionary that was in the process of merging to /r/ by the time of Taylor (1936). Because he also uses orthographic *l* to represent voiced lateral approximant /l/, this distinction cannot be determined accurately.

2.7 Approximants

Kalinago has two approximants /w/ and /j/. These are shown in the subsections below.

2.7.1 Voiced palatal approximant /j/

The voiced approximant /j/ seems to appear before all vowels except /i/ and /ɨ/. Breton marks this sound using the both the character *y* and the letter sequences *ia*, *ie*, *io*, *iou*, most likely due to confusion, since there are words that exist that have the high front vowel /i/ preceding /j/.

- | | |
|-------|---|
| (97) | <i>yamati</i> /jamati / ‘basket’ |
| (98) | <i>yayati</i> /jajati/ ‘pockmarked’ |
| (99) | <i>ierettê</i> , <i>yerettê</i> /jereti / ‘hummingbird’ |
| (100) | <i>iára</i> /jara/ ‘there’ (Garifuna <i>yara</i>) |

Breton seemed to note this difference when he could, placing an accent mark over the *i* if it began with /i/ and an accent mark over the following vowel if it was only the /j/ sound, but this system is not reliable. This distinction can only be reliably determined when looking at the Garifuna counterparts of the word. For example, he gives the phrase *ierécati none* ‘I hate it.’ (lit. ‘it is hateful to me’) without an accent mark on either the first *i* or *e*. But in Garifuna this word appears with /i/ before the approximant /j/ in *iyereeguti* ‘hated’, so we can conclude that the Kalinago form has an initial glide. Similarly, Breton gives *íúoüa* ‘shade, shadow, image’, while modern Garifuna has *iyawaiü* ‘image’ also suggesting that Kalinago has an initial glide. Regardless, while it is difficult to determine whether a word begins with /i/ or with /j/, the fact that the language contains the sound /j/ is what is most important.

2.7.2 Voiced labial-velar approximant /w/

In Kalinago, the voiced labial-velar approximant appears before all vowels except for /u/. Breton represents this with a series of digraphs and trigraphs such as *oV*, *oüV*, *ouV*, *uV*, *huV*, *hüV* (with V being any vowel except /u/). Similarly, to /j/, the approximant /w/ might also be preceded by a vowel, which can be difficult to distinguish through the transcriptions the sources used alone.

- (101) *oara* /wara/ ‘lung’
- (102) *canaoa* /kanawa/ ‘canoe’
- (103) *oüaloucouma* /warukuma/ ‘star’ (Garifuna *waruguma*)
- (104) *aboulécoüa* /apulekuwa/ ‘to lose’
- (105) *oüébou* /wepu/ ‘mountain’ (Garifuna *webu*)
- (106) *ueréhuere* /werewere/ ‘housefly’

Taylor (1936) also presents a curious comment about this approximant, stating in one of his footnotes that his digraph *hw* represents “a strongly aspirated ‘wh’ sound.” (p. 465). The two

words he presents with this sound are *héhwé* ‘snake’ and ‘*aohwééli*’ ‘he is dead.’ These words can be found in Breton’s dictionary as *héhue* ‘snake’ and *áhoüee* ‘to die’ but give no clear orthographical indication of strong aspiration. Additionally, Rat makes no mention of this sound in his grammar only stating that *h* is “always aspirated”. Taylor’s variety of English at that time likely had a distinct voiceless approximant /ɰ/, a sound that has disappeared for many English varieties, which made him more likely to hear this distinction if it was an allophonic variation (Ladefoged 2015).

In Garifuna these words respectively, are *hewe* and *ounwe* which provide no indication of /ɰ/. Because of the lack of data, as well as lack of cognates with this sound and the fact that Kalinago is maximally CV, I do not believe that /ɰ/ was ever a distinctive phoneme of Kalinago. It is possible that /w/ became a voiceless labial-velar fricative /ɰ/ before /e/, but without more examples to prove this allophonic variation, this will have to remain as speculation.

2.8 Vowels

Both Rat and Taylor describe the Kalinago vowels as being similar to the vowels in Romance languages, with Rat describing them as similar to Italian and Taylor describing them as being similar to Latin. Based on this description, it is likely then that Kalinago has at least /a/, /e/, /i/ however, the existence of /o/ and /u/ as separate phonemes in Kalinago is not so clear cut. Both Rat and Taylor also describe a sixth vowel that is most likely a high central unrounded vowel /ɨ/. Examples and evidence for each vowel's quality will be presented below.

	Front	Central	Back
High	i	ɨ	u
Mid	e		o
Low	←a→		

‘mother’ (1963:465). These are the only descriptions given of these sounds. Breton writes this sound with the sequence *eu*, and as *ê*. In the examples below /i/ is represented by *ü* in Garifuna orthography.

- | | | |
|-------|--------------------------------------|---|
| (118) | <i>–kêta</i> /kita/ causative suffix | (Garifuna <i>güda</i> /gida/, Lokono <i>kota</i>) |
| (119) | <i>eukê</i> /ixi/ ‘pus’ | (Garifuna <i>ühü</i> /ihi/, Lokono <i>ükhü</i> /ik ^{hi} /) |
| (120) | <i>haakê</i> /haki/ ‘come’ | (Garifuna <i>hagü</i>) |
| (121) | <i>iraheu</i> /irahi/ ‘child’ | (Garifuna <i>irahü</i>) |

While these descriptions are imprecise and unclear, looking at Lokono and Garifuna both reveal that they have /i/ as well (Taylor 1977:32). The imprecise descriptions given by Rat and Taylor might have to do with the effects of various phonetic environments on the vowel. Pet notes the same phenomena in Lokono stating, “The phoneme /i/ is phonetically an unrounded vocoid and fluctuates between central to back and mid to high, with a tendency to assimilate in height to the vowel of the following syllable.” (1990:14) Regardless, having a high central unrounded vowel is common in the phonemic inventories of Indigenous South American languages, especially languages along the coast (Campbell et al 1986), strengthening the claim that this vowel was present in Kalinago as well.

2.8.5. High back rounded vowel /u/

It is unclear whether /o/ and /u/ sounds are distinct or represent allophones of the same sound in Kalinago. Breton uses both orthographic *o* and the digraph *ou* making it appear that on first glance he means /o/ and /u/, respectively. Taylor also records words with *o* such as *konôbu* ‘rain’ and mentions that there is a “long *o*” sound which he writes as *ô*, which is often confused with /u/. In Breton’s dictionary, we can find this word as *conôboüi* and the Garifuna cognate of this word is *gunubu*. From the Garifuna word it would seem that there is no distinction at all

between /o/ and /u/. In looking at Lokono, Pet (1990) states that in Lokono, /u/ is an allophone of /o/. And in Garifuna, except for words of foreign origin, it is rare for /o/ to appear alone in Garifuna words. Instead it is often part of the diphthong *ou* forming a cognate with the diphthong *ao* in Kalinago. For example, ‘dog’ shows up as *aonli* in Kalinago and *ounli* in Garifuna. Words that contain the letters *o* and the sequence *ou* in Breton’s dictionary appear with only /u/ in Garifuna.

(122) *otocoïia* /hutukuwa/ ‘to kneel’ (Garifuna *hudugua*)

(123) *ora* /ura/ ‘skin’ (Garifuna *ura*)

(124) *oubécou* /ubexu/ (Garifuna *ubehu*)

(125) *oucháli* /usari/ ‘deer’ (Garifuna *usari*)

Another good example comes from the direct object morpheme which can be found in all three sources and the related languages

(126) *–one* 1665, *–uni, –oni* 1898, *–uni* 1936; direct object morpheme (Garifuna *–un* /ũ/, Lokono - ã)

This leads to the conclusion that that at least by the 1930s, /o/ and /u/ were not phonemically distinct in Kalinago. In fact, in the Breton dictionary, words with *ou* /u/ are far more abundant.

2.9 Nasalized vowels

Nasalized vowels are probably not phonemic in Kalinago, but rather some nasalized vowels stem from the elision of a nasalized consonant. For example, the word *aronca* /arũka/, recorded in 1665, appears as *arumuka* in Rat’s writing and *arumuga* in Garifuna.

Breton regularly indicates nasalization with a ~ over the vowel as well as by writing *n* after a vowel when the sound after the *n* is a consonant or when *n* is word final. He also employs *m* in the same way as well.

- (127) *moinchácou* /muwĩɛaku/ ‘widow’
 (128) *inimon* /inimũ/ ‘thread’
 (129) *manchalaca* /mãɛaraka/ ‘rabbit’ (Garifuna *masaraga*)
 (130) *-num* /nũ/ human plural suffix (Garifuna *nu*, Lokono *no*)

Rat makes no mention of nasalized vowels at all and does not record any. In fact, words that appear nasalized in Breton work appear without nasalization in Rat’s. This is due to Breton’s native language being French, which has distinctly nasalized vowels, making him more able to hear them. Nasalization of vowels near nasal consonants is common in the world’s languages, and are usually not phonemic. Similarly, it seems that though Breton might have been able to hear nasalized vowels, they were not a distinct phoneme of the Kalinago languages.

In the next section, I examine some morphemes of Kalinago and argue for classifying Kalinago as a middle-voice marking language.

Chapter 3. Morphology

Kalinago appears to be mainly suffixing, allowing just one morphological space for prefixes, but allowing multiple suffixes. Prefixes are limited to pronouns, the attributive prefix *ka-*, and the negative prefix *ma-*. In this way, Kalinago is similar to many of the other languages in the Arawakan family (Payne 1990). However, due to prolonged historical contact, Cariban speakers have also influenced the language grammatically through borrowings, such as independent pronouns, plural morphemes and vocabulary. In this section I will review Kalinago noun and verb morphology with an extended discussion on middle voice.

3.1 Nouns and associated morphemes

3.1.1 Plural morphemes

In Kalinago, pluralization is marked on nouns that are human; non-human nouns do not receive any plural markings. This pattern of human versus non-human distinction is a feature of many Arawakan languages (Payne 1990, Pet 1987). There are three plural morphemes that appear in the data, *-no*, *-yan*, and *-ku*.

3.1.2 Plural suffix *-no*

The Arawakan plural morpheme *-no* is used in Kalinago for nouns of Arawakan origin.

⁹(131)

itiyu ‘relative’

itiyu-no ‘relatives’ (Breton & Besada 1997:111)

matao ‘twin’

matao-no ‘twins’ (Breton & Besada 1997:177)

tiyeitu ‘woman, girlfriend’

tiyeito-no ‘women, girlfriends’ (Breton & Besada 1997:231)

eyeri ‘man’

eyeri-no ‘men’ (Breton & Besada 1997:115)

This plural is also extended from humans to spiritual beings as shown in example (132):

(132)

semi ‘god’

semi-no ‘gods’ (Breton & Besada 1997:69)

mapoya ‘bad spirit’

mapoya-no ‘bad spirits’ (Breton & Besada 1997:172)

3.1.3 Plural suffix *-ya*

The plural suffix *-ya* is a morpheme of Cariban origin, where it occurs only with select animate nouns (Courtz 2008). Unfortunately, Courtz does not mention these select animate nouns and other references do not state the selection either. The examples in (133) are from the Carib language, with the plural orthographically written as *-jan* from (Courtz 2008).

(133) Carib language data

woryi ‘woman’

⁹ The examples in this chapter are written in the same phonemic transcription as described in Chapter 2.

woryijan 'women'
aporemy 'owner'
aporenjan 'owners' (Courtz 2008:59)

In Kalinago this plural, phonemically *-yan*, appears in words of Carib origin.

(134) *wiriyān* 'women' (Carib *woryi*) (Breton & Besada 1997:190)

(135) *wikeri* 'man' (Carib *wokori*)
wikeriyan 'men' (Breton & Besada 1997:96)

3.1.4 Plural suffix *-ku*

A third plural suffix *-ku*, appears in words of Carib origin that reference familial relationships. This morpheme itself is of Carib origin, from the morpheme *-kon*, and is the most commonly used plural morpheme in the Carib language (Courtz 2008). In Carib, it is used with both animate and inanimate nouns. However, in Kalinago, it mostly appears in words that reference familial relationships and words that are Carib in origin. This probably has roots in the way it is currently used in Carib, where it can be used as a polite form when “speaking about or addressing in-laws” (Courtz 2008:60). It does not appear to be used with inanimate nouns in Kalinago.

(136)
iparimuku 'sons-in-law' (Breton & Besada 1997:7) Carib *parimykon* (Courtz 2008:339)
¹⁰*imetamuku* 'father-in-law' (Breton & Besada 1997:7) Carib *tamukon* (Courtz 2008:379)
waliku 'canoe crew' (Breton & Besada 1997:202)

¹⁰ The *ime* part of this word also carries two morphemes of Carib origin *y* - '1 sg' and *-me* a diminutive, but these morphemes are not productive in Kalinago.

3.2 Pronouns

The Kalinago language distinguishes between first, second, and third persons, and between singular and plural in its pronouns. Kalinago has seven native pronouns and also two borrowed independent pronouns of Cariban origin which men used. Of the native morphemes, the first person singular and second person singular were used primarily by women while the native pronouns were used by both genders (Rat 1898).

In Kalinago, the use of independent pronouns is optional if the verb carries subject or object prefixes. ¹¹Rat (1898:296) outlines Kalinago independent pronouns as follows:

person	singular	plural
first	<i>nukuya</i> 'I' <i>female speaking</i> <i>ao</i> 'I' <i>male speaking</i>	<i>wakuya</i> 'we'
second	<i>bukuya</i> 'you' <i>female speaking</i> <i>amoro</i> 'you' <i>male speaking</i>	<i>hukuya</i> 'you pl.'
third	<i>tukuya</i> 'she' <i>likuya</i> 'he'	<i>n^hakuya</i> 'they'

Table 2. Kalinago pronouns Rat (1898: 296)

(137)

Tokoya toha?

tokoya toha

3.sg.f there

'Her over there?'

¹¹ Rat does not give an example sentence for each pronoun, but provides the table shown in Table 2 and the four examples in (137) – (139). Unfortunately, example sentence for every independent pronoun cannot be found in the documentation.

Likuya atikayahali.

Likuya atikaya -ha -li

3.sg.masc do- PAST -3.sg.

‘He did it.’

As seen in Rat’s table in Table 2, Kalinago has two additional pronouns for 1st person singular and 2nd person singular for male speakers. Female speakers used native Arawakan, 1st person singular, *nukuya*, and 2nd person singular, *bukuya*, but both Breton and Rat noted that male speakers used 1st person, *ao*, and 2nd person singular, *amoro*. These pronouns are of Carib origin and are borrowed from the Carib first person singular pronoun, *awu* and the second person singular pronoun *amoro* (Courtz 2008:52). Lokono has not borrowed these pronouns, but in the past, Garifuna men were noted to have used the Carib pronouns while women used the Arawakan pronouns. This distinction is now lost in Garifuna, and male speakers freely use Arawakan, *nukuya* and *bukuya* (Escure 2004).

(138) *Ao pa puma*

ao pa p- uma

1.sg.masc go 2.sg- with

I go with you.

(139) *Amoro pa numa*

amoro pa n- uma

2.sg.masc go 1.sg.-with

‘You go with me.’

3.3 Possession

3.3.1 Possession with pronominal prefixes

Kalinago differentiates between singular and plural in its pronominal prefix and between first, second, and third person. Kalinago has one fossilized pronominal prefix of Carib origin, *i-*, which appears occasionally in some possessed nouns. The pronominal prefixes in Kalinago are given in Table 2.

person	singular	plural
1	<i>n-</i>	<i>w-</i>
2	<i>p-</i>	<i>h-</i>
3	<i>t-</i> (fem.) <i>l-</i> (masc.) <i>i-</i> (masc)	<i>n^ha-</i>

Table 3. Kalinago pronominal prefixes.

Pronominal prefixes have the same form as subject prefixes attached to verbs. When the pronominal prefixes are attached to a noun they indicate possession of the noun. Rat (1898) gives an example of the pronominal prefixes combined with the word *iri* ‘name’, below in (140)

(140)

niri ‘my name’

piri ‘your name’

liri ‘his name’

tiri ‘her name’

wairi ‘our names’

hiri ‘your pl. names’

n^hairi ‘their names’

(Rat 1898:299)

3.3.2 Possessive suffixes *-ni*, *-te*, *-ri*

In Kalinago documentation three suffixes, *-ni*, *-te*, and *-ri* appear on possessed nouns. Payne (1990) proposes that these three suffixes, along with a final vowel change and zero suffixation, mark noun classes in both proto-Arawakan and proto-Cariban.

Proto-Arawakan forms:

- a. *-ni
- b. *-te
- c. *-re
- d. *-V# > *-e#
- e. ∅

(Payne 1990:81)

The manner in which these suffixes are used varies from language to language, and they no longer delineate strict noun classes. For example, Piro, an Arawakan language spoken in Peru, uses phonemic *-te* to mark regular nouns, phonemic *-ne* for household items that are handmade and phonemic *-le* for other items that are handcrafted. In Asheninca, another Arawakan language, the suffixes operate with phonological rules, so that phonemic *-ne* appears with nouns that have two vowels or phonemic fewer, and *-te* with nouns that have three vowels or more (Payne 1990). In all other languages the assigning of the suffixes seems to be arbitrary. Their use in Kalinago is analyzed here.

3.3.2.1 Possessive suffix *-ni*

The suffix *-ni* as a possessive suffix is not widespread in the documentation, though a few tokens have been found.

(141)

turai ‘pot’
nituraini ‘my pot’ (Breton & Besada 1997:239)

ɕiki ‘chigoe, flea’ (Breton & Besada 1997:76)
niɕikini, ‘my chigoe, flea’ (Breton & Besada 1997:162)

The usage of *–ni* as a possessive suffix is not commonly found within the data. Rather, it is homophonous with the nominalizer *–ni* which is more widespread.

3.3.2.2 Possessive suffix *–te*

Taylor (1977) proposes that in Kalinago, *–te* is used for household nouns that are currently in use by the speaker. Some tokens found in Kalinago seem to hold to that pattern. However, there are also quite a few that do not.

(142)

akusa ‘needle’
*nukuse**te* ‘my needle’ (Breton & Besada 1997:10)

alele ‘spit’
*nalele**te* ‘my spit’ (Breton & Besada 1997:15)

erei captain
n^hereite ‘our captain’ (Breton & Besada 1997:109)

iyuri ‘tobacco’
niyurite ‘my tobacco’ (Breton & Besada 1997:154)

3.3.2.3 Possessive suffix *–ri*

Similar to *–te*, it is unclear which types of nouns receive this suffix since the tokens collected range from potatoes to medicine men. Again, this might be a remnant of a class system, but as of now there is no way to determine when a noun receives the suffix *–ri*.

(143)

pena ‘door’
pipenari ‘your door’ (Breton & Besada 1997:41)

mapi ‘potato’ (Breton & Besada 1997:171)
pimapiri ‘your potato’ (Breton & Besada 1997:44)

poye ‘medicine’
nipoyeiri ‘my medicine man’ (Breton & Besada 1997:44)

tona, ‘river’
nitonali, ‘my river’ (Breton & Besada 1997:235)

Occasionally, the possessives that end with the *-ri* suffix appear to take the prefix *i-*. This pattern tends to appear in words of Cariban origin. Courtz (2008) notes that in Carib, the prefix *j-* [j] appears when nouns beginning with *a*, *e*, *o*, or *u* are prefixed with the first person singular pronoun *y-* ([i]). This might explain the *i-__-ri* pattern that appears on some nouns in Kalinago.

(144)

amoiri ‘daughter’ Carib *emui*
iamoiri ‘my daughter’ (Breton & Besada 1997:18)

aneki ‘sickness’ Carib *anyky*
ianekiri ‘my sickness’ (Breton & Besada 1997:21)

alami ‘legband’
ialamiri ‘my legband’ (Breton & Besada 1997:14)

amaçi ‘chief’
iamaçiri ‘my chief’ (Breton & Besada 1997:17)

Overall, while *-ni*, *-te*, and *-ri* do appear on possessed nouns, no generalizations can be made about which class of nouns they appear on, similar to the conclusion of arbitrariness made by Payne (1990).

3.4 Demonstratives

Kalinago does not use definite or indefinite articles; however, the language does have demonstratives. Kalinago makes a three-way distinction for demonstratives: proximal, medial, and distal. Proximal refers to objects near the speaker, medial refers to a short distance away from the speaker, and distal refers to object at a large distance away from the speaker. The demonstrative morphemes are bound morphemes that are inflected for gender. Without gender marking, they are *-ha*, *-ra*, and *-keta* (Rat 1898, Breton & Besada 1997).

	Proximal	Medial	Distal
Feminine	<i>toha</i>	<i>tora</i>	<i>tuketa</i>
Masculine	<i>liha</i>	<i>lira</i>	<i>liketa</i>

Table 4. Demonstratives (Rat 1898:295)

3.5 Postpositions

Kalinago postpositions can carry inflectional prefixes that mark person and number. In some cases, they can attach to a noun.

(145)

<i>-oma</i> with	(Rat 1898:303)
<i>n-oma</i> ‘with me’	(Rat 1898:303)
<i>arabu-sen</i> through	(Rat 1898:303)

3.6 Verbs

Among Arawakan languages, Aikhenvald (1999:85) states that the verb is “the only obligatory constituent within a clause.” Word order in Kalinago tends to lean towards VSO (see Chapter 4), with verbs being an important grammatical element. In Kalinago, the verb is where most morphological processes occur, including the formation of the middle voice. In order to

understand the morphology of Kalinago middle voice, a brief explanation about Kalinago verbal morphology is necessary.

Kalinago infinitive verbs tend to have an initial vowel such as *a-* (occasionally *e-*, or *i-*), but in some cases the vowel is optional, as in the formation of some imperatives. This initial verbal vowel is also found in throughout the languages in the Caribbean branch of Arawakan languages. Example (147) shows some tokens from Garifuna with the same initial vowel. After the vowel is the verb root, followed by a fossilized CV verbal suffix,

(146) *abinaxa*

a- *bina* *-xa*
 verbal vowel + ROOT + verbal suffix
 ‘to dance’

(Breton & Besada 1997:3)

Other common verbal suffixes are *-ha*, *-ta*, and *-ra* (Taylor 1977b). In Kalinago, it does not seem that each verbal suffix has influence on a verb’s meaning, however they might have had some meaning in the past. Taylor (1977b) comes to a similar conclusion but speculates that the meanings have been lost, since in Garifuna, these verbal suffixes appear to sometimes, but not always, change the semantics of a verb as shown in (147). The roots of the verbs are bolded.:

(147)

as ora ‘to roast’	aso ha ‘to sting’
amuru ha ‘to squeeze’	amuru da ‘to tighten’
aga ñera ‘to gain (earn, win)	aga ñeha ‘to buy’ (from French <i>gagner</i>)
afay ara ‘to travel by boat, to float’	afay aha ‘to navigate a boat’

(Taylor 1977b:47)

According to Taylor while it seems sometimes the verbal suffixes slightly change the meaning of the verb, there isn’t enough of a regular pattern. They do not have any bearing on the voice of a verb and no particular meaning can be assigned to them. It seems that for both Garifuna and Kalinago there might have been some semantic application of these suffixes

historically but they are now fossilized with their verb stems. Because of this, they will simply be referred to as verbal suffixes or “VS” in glosses.

3.6.1 *Present tense*

Present tense in Kalinago is indicated by using subject prefixes with the verb root. There is no overt present tense morpheme.

(148) *wasuaha kiere*

w-asuaha kiere

1.pl-cut cassava.root

‘We cut up cassava root’ (Rat 1898:314)

(149) *natika yamati*

n-atika yamati

1.sg-make basket(s)

“I make baskets” (Rat 1898: 313)

3.6.2 *Past tense*

The past tense is indicated by the suffix *–ha* which is attached to the verb after the verbal suffix.

Either a subject prefix can be used, or a subject suffix placed after *–ha*.

(150)

atipikahali kanawa

atipika-ha-li kanawa

fall/tip-PST-3sg.m.PAST canoe

The canoe tipped over

- (151) *n^hapunahahai makaiti*
 n^ha-apunaha-ha-i ma-akai-ti
 3.pl-bury-PAST-3.sg NEG-container/coffin-3.sg.m
 ‘They buried him without a coffin.’

3.6.3 Future tense

The future morpheme is indicated with the suffix *-pa* which is attached to the infinitive. Similar to the past tense, a subject prefix can be used or a subject suffix can be placed after *-pa* to indicate future tense.

- (152)
- (a) *elepatina*
ele-pa-tina
be.late-FUT-1.sg
 ‘I will be late’
 - (b) *wetupatina*
wetu-pa-tina
sleep-FUT-1.sg
 ‘I will sleep/I will retire to bed’
 - (c) *neleletupatina*
neleletu-pa-tina
scratch-FUT-1.sg
 ‘I will scratch’

3.7.1 Kalinago middle voice morphology

The middle voice in Kalinago is formed with the middle voice morpheme *-kuwa* in a number of ways. In regular verbs *-kuwa* is generally attached after the verbal suffix.

(153)

apara

¹²*apa-ra-kuwa*

kill-VS-MID

‘to kill’

(Breton & Besada 1997:26)

Adjectives, which are usually derived from verbs and behave similarly to verbs, do not carry a verbal suffix. In this case *-kuwa* is simply added to the end of the adjective. This process also occurs with verbs of Carib origin that also do not have a verbal suffix as in (154):

(154)

a. *taka-kuwa-tina*

short-MID-1SG

‘I am short’

(Breton & Besada 1997:51)

b. *natu-kuwa-tina*

stretch-MID-1.SG

‘I stretch’

(Breton & Besada 1997:183)

Another lesser-used process is to remove the final vowel of the verbal suffix¹³ and add

-uwa:

¹² *apara* also means to hit, or beat, and could have the sense of killing someone by beating someone to death. War clubs were a common melee weapon in Kalinago society. This verb would fall in the category of a spontaneous event, such as a sudden blow to the head.

¹³ For the purposes of this work, instead of infixation, I analyze the addition of *-uwa* as a suffixing operation, with an epenthetic back vowel to prevent consonant clusters that are generally prohibited in Kalinago with the exception of some loanwords. Currently, there is no adequate linguistic motivation that would prefer one process over the other except for the fact that Kalinago and Arawakan languages, in general, tend to be largely suffixing and infixing is not common (Aikhenvald 1999).

(155) *akakoça* – ‘to revive’

akako-ç¹⁴-uwa

revive-VS-MID

‘to revive, renew’

(Breton & Besada 1997:5)

Overwhelmingly, among the tokens collected, adding *-kuwa* is the most common. Of the 558 middle voice tokens that were collected from the dictionary, roughly 490 of the tokens (87%) use the suffix *-kuwa*¹⁵. Only 68 of the tokens collected used *-uwa* along with the verbal suffix.

Additionally, Breton (1665) explicitly defines *-kuwa*, (written as *coüa* in the text) as giving a middle or reflexive meaning:

“coüá, joint au nom veut dire: propre, comme káyaniali tiraheúcoüa, il a ésposé sa proper fille ; joint au verbe, il signifie : me, te, etc., comme arámêtaccoüa níem, je me cache, si vous dites : arámêtaccoüa niénli, c’est-à-dire c’est moi-même qui l’ai cache.”

(Breton & Besada 1997:91)

Translated in to English as:

“kuwa, with the verb it means: ‘own’ like káyaniali tirakuwa, he marries his own daughter ; with the verb it means : to me/myself, to you/yourself like arametakuwa niyan I hide, if you say : arametakuwa niyanli it is to say it is myself that I hide.”

In this entry the French pronouns Breton gives can either refer to a reflexive or middle voice meaning, since French uses the same morpheme for both (Taylor 1977b). However, looking at the last two example phrases given, which are identical except for the added object *-li*, a middle voice interpretation is acceptable.

(156)

arametakuwa

n- iyan

hide- VS-MID

1SG.SUBJ-BE

‘I hide’

¹⁴ The digraph *ç* represents the voiceless alveolo-palatal fricative *ç*.

¹⁵ Written orthographically in various ways such as *coua*, *-coüa*, *-coa*, *goua*, *-goüa*, *goa* and with a number of variations of accent marks on the vowels.

<i>arame-ta-kuwa</i>	<i>n- iya -li</i>
hide- VS-MID	1SG.SUBJ-BE-3SG.OBJ
‘I hide it’	(Breton & Besada 1997:91)

Similar to other middle marking languages, the Kalinago middle morpheme overlaps with the reflexive *-onikuwa*.

(157)	<i>maita -kuwa-ti-ti</i>	<i>la-onikuwa</i>
	NEG-control-MID-DISP-3SG	3sg.m-REFL
	‘He doesn’t control himself.’	(Breton & Besada 1997:177)

Kalinago can be classified as an intermediate two-form cognate system. This system is one in which the reflexive consists of the middle voice morpheme and another semantically distinct morphological element. In Kalinago, the reflexive can be broken down into two parts, *-oni*, a postposition meaning ‘to’ and the middle marker *-kuwa*.

(158)	a. <i>kotanume-ti</i>	<i>n-oni</i>
	disgusting-3SG	1SG-to
	‘It is disgusting to me.’	(Breton & Besada 1997:90)

b. <i>cuputuwi</i>	<i>n-iya</i>	<i>l-oni</i>
advise	1SG-be 3	SG-to
‘I am advising him’	(Breton & Besada 1997:85)	

This system also has a ‘heavy’ and ‘light’ form, with the heavy being the reflexive and the light form being the middle voice morpheme. For Kalinago, the heavy form is the reflexive *-onikuwa*, and the light form is *-kuwa*.

3.7.2 Categories of Kalinago middle voice

With the exception of the indirect middle, the basic middle voice situation types can be applied to many of the middle voice tokens. Below is the list of middle voice types with the corresponding Kalinago verb or verb phrase from Breton (1665):

A. Body action middles

i) Grooming and body care:

- (159) *ɕike-kuwa* *l- o -ha -li* *l-iyuma l-ao*
scrub-MID 3SG-AUX-PAST-3SG.OBJ 3SG-mouth 3SG-INSTR
‘He scrubbed his mouth with it.’ (Breton & Besada 1997:79)

- (160) *puwi-ta-kuwa* *p-a-na*¹⁶
scrape-VS-MID 2SG-AUX-1SG
‘Scrape me.’ (Breton & Besada 1997:217)

ii) Change in body posture:

- (161) *rali-kuwa-pa*
low-MID-IMP¹⁷
‘Lower (yourself)!’ (Breton & Besada 1997:218)

- (162) *oto-kuwa-pa*
kneel-MID-IMP
‘kneel’ (Breton & Besada 1997:200)

- (163) *tunyu-kuwa-tina*
squat-MID-1SG
‘I squat’ (Breton & Besada 1997:238)

¹⁶ This refers to the traditional practice of scraping the body with animal teeth in order let out blood. It is not practiced anymore among the Kalinago, but was thought to give good health.

¹⁷ IMP = Imperative

iii) Nontranslational motion:

- (164) *pala-kuwa linya*
roll-MID 3SG-be
'It rolls' (Breton & Besada 1997:36)
- (165) *ɕuleme-kuwa*
turn- MID
'to turn' (Breton & Besada 1997:87)

iv) Translational motion

- (166) *payara-kuwa-pa nh -e*
cross -MID -IMP-3SG.OBJ
'cross it!' (Breton & Besada 1997:41)
- (167) *akuyu-kuwa*
return-MID
'return' (Breton & Besada 1997:10)

B. Indirect Middles – There are no verbs in this category that appear with the middle voice in Kalinago.

C. Emotion Middles

- (168) *aya-kuwa*
cry -MID
'to cry' (Breton & Besada 1997:33)
- (169) *ɕekale-kuwa n- o -pa*
accuse-MID 1SG-AUX-FUT
'I will accuse' (Breton & Besada 1997:68)
- (170) *aɕu -ra-kuwa*
defame-VS-MID
'to defame, gossip' (Breton & Besada 1997:8)

D. Cognition Middles

- (171) *ka- ɕiya -ra-kuwa-tina*
ATTR-understand-VS-MID-1SG
'I understand' (Breton & Besada 1997:79)
- (172) *iyuli-kuwa na-o*

confuse-MID 1SG-AUX

‘I get confused.’

(Breton & Besada 1997:155)

E. Spontaneous events

(173) *kululu -kuwa-li emetali*

collapse-MID-3SG.PAST cliff

‘the cliff collapsed’

(Breton & Besada 1997:94)

(174) *waka-kuwa-tu kalapa*

spread-MID-3SG oil

‘the oil spreads’

(Breton & Besada 1997:207)

(175) *tili-kuwa-ha-li*

break-MID-PAST-3SG.PAST

‘It broke’

(Breton & Besada 1997:232)

Kalinago middle voice morphemes occur in all the basic situation types except for the indirect middle. Kemmer (1993) notes that this is not unusual and that languages often have asymmetries in their middle voice situation types. Of the situation types, spontaneous events have a large number of tokens, most likely due to the fact that it has the largest number of subtypes among the basic types and can cover a broad range of verbs.

Another situation type in which Kalinago middle voice marking appears that is not listed above is the category of naturally reciprocal events. These are actions which by their nature cause two or more than two separate participants to be affected, like *meet*, *join*, or *gather*.

(176) *aniya-ta-kuwa*

mix -VS-MID

‘to mix, knead’

(Breton & Besada 1997:11)

- (177) *ɬara -kuwa-a-li*
 separate- MID -past-3sg.past
 ‘It separated.’ (Breton & Besada 1997:67)

- (178) *piyama-kuwa*
 two - MID
 ‘to pair up, to be in a pair’ (Breton & Besada 1997:42)

Another category in which the middle morpheme occurs is in what Kemmer (1993) calls the facilitative and Alexiadou and Doron (2012) term the dispositional. These are middle meanings like the verb *cut* in the sentence. *The bread cuts easily*. In this construction the attributive *k-* is prefixed to the verb and the dispositional suffix *-ti* is placed after the middle voice morpheme.

- (179) *k- apuwara-kuwa-ti-ti*
 ATTR -deceive- MID -disp-3sg
 ‘He is a deceiver’ or ‘He deceives well’ (Breton & Besada 1997:3)

- (180) *k- ipi-kuwa-ti-ti*
 ATTR-cut- MID -DISP-3sg
 ‘It cuts well’ (Breton & Besada 1997:42)

- (181) *k- apa-kuwa-ti-ti*
 ATTR- suffer- MID -DISP-3sg
 ‘he suffers well / he endures well’ (Breton & Besada 1997:26)

These examples demonstrate that in both morphology and semantic environment, Kalinago middle voice marking is in accordance with other middle marking systems. Around 94% of Kalinago verbs could be categorized using the categories given by Kemmer (1993). In looking at the percentages, however, the majority of verbs in the data with middle voice

morphemes fell into the category of spontaneous events. Though many of the verbs overlap in categories, overall, the category of spontaneous events has the largest number of middle voice tokens at 55% as shown in Table (3)

Middle Voice Situation Type	Percentage of Tokens in Kalinago
Body Actions	5%
Indirect	0%
Emotion	10%
Cognition	3%
Spontaneous Events	55%
Naturally Reciprocal Events	5%
Facilitative	6%

Table 5. Middle voice situation types and their percentages

Part of the reason for this large amount may be due to the fact that the spontaneous events category encompasses a large number of verbs, some of which can probably be counted in more than one category. Nonetheless, there were approximately 6% of verbs that could not be categorized and tokens that could be duplicates or redundant were not counted. In some cases, the gloss did not match the morphology of the word and in other cases the gloss did not provide an adequate translation of the Kalinago phrase or sentence, which made determining the exact meaning of each morpheme difficult to determine.

3.8 Adjectives

Adjectives in Kalinago are essentially verbs, the difference being that instead of prefixes, they are only permitted to use suffixes to indicate the subject. They cannot take the subject prefixes. The subject suffixes that are used are the same as the ones used by verbs.

(182)

kireti

kire -ti

heavy -3sg.m

he/it is heavy (Breton & Besada 1997:163)

hanuhutetina

hanuhute -tina

afraid -1.sg

‘I am afraid’ (Rat 1898:295)

When modifying an explicit noun, adjectives come before the noun they modify.

(183)

ulilitu tona

ulili-tu tona

deep-3sg.f water

‘deep water’ (Breton & Besada 1997:211)

wairiti wewe

wairi-ti wewe

large-3sg.m tree

‘large tree’ (Rat 1898:295)

This chapter has demonstrated that Kalinago is a middle-voice marking language. In the next chapter, I describe the Kalinago sentence structure, including the structure of comparatives.

Chapter 4. Syntax

One of the major syntactic features by which languages are classified is constituent order, or the way languages align their subjects (S), verbs (V) and objects (O). Greenberg's (1963) classification of languages according to word order spurred some of the earliest movements to provide a typological classification for the various constituent orders. Greenberg (1963) did not predict constituent orders, but noted that there were general syntactic features of languages that shared similar constituent ordering (Payne 2007). There are six possible orders of constituents ordered here from most frequent to least frequent: SOV, SVO, VSO, VOS, OSV and OVS. Determining a basic word order can be difficult, and it is recommended to use clauses that are "pragmatically neutral" in order to determine word order. This means excluding

1. dependent clauses
2. paragraph-initial clauses
3. clauses that introduce participants
4. questions
5. negative clauses
6. clearly contrastive clauses (e.g., clefts, answers to questions, etc.) (Payne 2007:77)

Languages can have degrees of how flexible they are in ordering their constituents and can range from extremely flexible, or free word order, to rigid. Even if a language has one dominant word order, it might display a varying word order under specific contextual conditions. With languages that are flexible, there can also be two or more constituent orders that are more dominant than others and occur most frequently.

Generally, the position of S, V, and O has an influence on other linguistic structures. Some linguists propose that the correlations between constituent order and linguistic structures can be predicted, although not all languages follow these patterns. Overall, languages tend to behave similarly to other languages that share the same constituent order (Payne 2007). Some traits of VSO languages are:

1. Head initiality
2. Prepositional
3. Post-nominal adjectives
4. Preverbal tense, mood/aspect, question and negative particles
5. Inflected prepositions
6. Left-conjunct agreement
7. Lack of verb “have”
8. Copular constructions without verbs
9. “Verbal noun” infinitives

(Carnie & Guilfoyle 2000:10)

4.1 Kalinago constituent order

There are a few texts that allow us to make some generalizations about Kalinago syntax. In Kalinago, as in many Arawakan languages, the only obligatory constituent of the clause is the verb. In general sentences are verb initial:

¹⁸(184)

a) *apaɕayaru parana*

apaɕaya-ru parana

break -3sg.fem wave

‘The waves break’

(Breton & Besada 1997:2)

b) *aɕuwikaharu pini*

aɕuwika -ha -ru pini

boil -PAST-3sg.fem wine

‘The wine has boiled’

(Breton & Besada 1997:8)

c) *wasuaha waititi wewe*

wa- asua-ha wairi -ti wewe

1pl- cut-PAST large -3sg.adj tree

‘We cut down the large trees’

(Rat 1898:294)

d) *tapuahaya aikini*

t-apuaha-ya aika-ni

3sg.fem.subj-cook-PROG eaten.thing-NOM

‘She cooks food’

(Rat 1898:294)

Instances of VOS can be found:

¹⁹(185)

a) *Kabiɕati watikini waipayawa*

kabiɕa -ti wa- atiki -ni waipayawa

destroy-3sg.masc 1pl- catch -NOM shark

‘The shark destroys our catch’

(Breton & Besada 1997:2)

¹⁸ The examples in this chapter are written in the phonemic transcription developed in Chapter 2.

¹⁹ I have not been able to find more examples where the object and subject are independent nouns, not pronouns or with pronominal affixes.

This is not surprising since variation in word order is common in verb initial languages, making it difficult to determine a basic order. Verb initial languages tend to be more flexible, as Payne (2007:76) states,

“If a language employs verb-initial clauses quite frequently (approximately 25 percent or more) in discourse, it will probably be quite difficult to determine a “basic” order. This will be because of either or both of the following tendencies: (1) verb-initial languages often avoid the use of full noun phrases...; and (2) verb-initial languages often are less sensitive to grammatical relations than are other languages... The order of the noun phrases following the verb tends to be determined by pragmatic or semantic factors that are only indirectly characterizable in terms of grammatical relations.” (Payne, 2007:76)

Overall the dominant word order in Kalinago is verb initial with a preference for VOS.

4.2 Copular

In Kalinago, an overt copula is used very rarely. When it does appear, it is often the in form of the suffix *-ya* attached to the head noun.

(186)

- a) *Wikiri*
 wikiri-ya-li
 man-be-3sg.masc
 ‘He is a man’ (Rat 1898:302)

- b) *Yaruiaru*
 hiyaru-ya-ru
 girl-be-3sg.fem
 ‘She is a girl’ (Rat 1898:302)

- c) *karifunayatina*
karifuna-ya-tina
Karifuna-be-1sg
‘I am Karifuna’ (Rat 1898:302)

This is clearly derived from the verb *iya* ‘to be.’ Rat (1898) noted that in most cases “...the verb *ía* [*iya*] is often understood” (Rat 1898:303) This is especially true for stative verbs where an explicit copular is usually not needed:

- (187)
a) *Yahatina*
yaha-tina
here-1sg
I am here (Rat 1898:303)

- b) *Irufutina*
irufu-tina
good-1sg
I am good (Rat 1898:303)

- c) *Inaruti*
inaru-ti
true-3sg
It is true (Rat 1898:303)

4.3 Comparative constructions

The documentation on Kalinago does not show many comparative constructions, but there are a few examples that demonstrate the basic construction of a comparative. In the prototypical comparative scheme, languages distinguish two participants based on some gradable

characteristic. This characteristic is often expressed using an adjective or a stative verb. (Dixon 2008). According to Dixon (2008): “There are three basic elements in a prototypical comparative scheme: the two participants being compared, and the property in terms of which they are compared.” To demonstrate this, the following scheme can be used,

(188)

John	is more	handsome	than	Felix.	
COMPAREE	INDEX	PARAMETER	MARK	STANDARD	(Dixon 2008:788)

The COMPAREE is the participant being compared, which in this example is John. The STANDARD is Felix, the participant used as the standard of the comparison. The PARAMETER is the gradable characteristic that the participants are being compared on. The INDEX of comparison is the scale on which the characteristic is graded, like *more* or *less*. Finally, the MARK is a “grammatical function of the STANDARD”, and provides a connection from the STANDARD to PARAMETER. (Dixon 2008).

While all languages use these basic components to form comparatives, the manner in which the components are grammatically expressed can vary. Dixon (2008) gives eight different grammatical strategies, or types, that languages use to express the comparative.

Kalinago uses the A2 construction type based on Dixon’s (2008) scale of strategies. Languages that employ this type of construction are often languages in which adjectives display similar morphological and grammatical characteristics as verbs, unlike languages that use A1 constructions, where adjectives are more noun-like in behavior. In languages that use A2 constructions, the PARAMETER is an adjective that is the head of a predicate, rather than a noun, and is the only type allowed as a PARAMETER. The INDEX can have a distinct form but can also be null. For the MARK, most languages the employ this type use a morpheme that can have a different meaning in a non-comparative construction. For example, most use a morpheme

corresponding to the ablative word ‘from.’ Lastly, for some A2 constructions, the STANDARD can also be omitted (Dixon 2008).

In Kalinago, the PARAMETER is a stative verb that usually comes at the beginning of the sentence. The verb includes a subject suffix that agrees with the COMPAREE, which may or may not be explicitly stated in the sentence. Like many A2 constructions, there is no Index, and the Mark is the ablative adposition ‘from.’ The general order of comparative components in Kalinago is shown in (189)

(189)

PARAMETER	COMPAREE	MARK	STANDARD
-----------	----------	------	----------

Since the PARAMETER is generally a stative verb in Kalinago, the COMPAREE is often not a separate NP, but is indicated by the agreeing subject suffix on the verb.

(190)

PARAMETER+COMPAREE	MARK	STANDARD
<i>ihati</i>	<i>loaria</i>	<i>weyu</i>
iha -ti	l- oaria	weyu
clear -3sg.m	3sg.m- from	sun

‘It is clearer than the sun’

(Breton & Besada 1997:134)

Similarly, the STANDARD is not always expressed as a separate NP, but can appear in the sentence as an agreeing subject prefix on the MARK. As a result, the comparative scheme for Kalinago can be revised to the scheme (191) where alpha indicates agreement between the PARAMETER’S subject suffix and the COMPAREE, and agreement between the Standard and subject prefix on the Mark. Parentheses indicate an optional explicit component.

(191)

PARAMETER+COMPAREE _α	(COMPAREE _α)	STANDARD _α +MARK	(STANDARD _α)
<i>kauputuliyali</i>	<i>likia</i>	<i>noária</i>	<i>ø</i>

ka-	uputu	-li	-iya	-li	likia	n-	oaria
ATTR-	captain	-NOM	-be	-3sg.m	he	1sg-	from
'He is a better captain than I am'						(Breton & Besada 1997:195)	

In one case there isn't an explicit COMPAREE, but the COMPAREE is still present as a subject prefix on the verb:

(192)	PARAMETER+COMPAREE	COMPAREE	STANDARD+MARK	STANDARD
	<i>Wairitina</i>	\emptyset	<i>loaria</i>	<i>lira</i>
	Wairi -tina		l- oaria	l- ira
	tall -1sg		3sg.masc- from	3sg.m - that
	'I am taller than he is.'		(Rat 1898:296)	

In another documented example, the explicit Comparee came before the Parameter:

(193)	COMPAREE _{α}	PARAMETER+COMPAREE _{α}	STANDARD+MARK
	<i>Liha</i>	<i>wairiti</i>	<i>noaria</i>
	L- iha	wairi -ti	n- oaria
	3sg.m- that	tall -3sg.m	1sg- from
	'He is taller than I am.'		(Rat 1898:296)

The construction of comparatives in Kalinago closely mirrors the comparative strategy of Wayuu, another Caribbean Arawakan language that is a sister to Kalinago and that also uses A2 constructions for the comparative:

(194)	PARAMETER+COMPAREE _{α}	COMPAREE _{α}	STANDARD _{α}	MARK+	STANDARD _{α}
	<i>Müliashi</i>	<i>Luuka</i>	<i>nuulia</i>		<i>Kamiirü.</i>
	mülia-shi	Luuka	nü-ulia		Kamiirü
	poor -M	Lucas	3M-from		Camilo

'Lucas is poorer than Camilo'	(Álvarez 2005:10)
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In (194) we can see that Wayuu also employs an a stative verb for its PARAMETER and employs a similar agreement strategy on COMPAREE and STANDARD. This particular example also has a null INDEX, similar to Kalinago, but an INDEX can also be explicit in Wayuu. There are no examples in the documentation of an explicit INDEX in Kalinago, but this might be due to a lack of data rather than a grammatical prohibition.

4.4 Interrogatives

4.4.1 Polar questions (yes/no questions)

Polar questions are interrogative phrases that require either “yes” or “no” for the answer. In Kalinago, there is no variation in word order in these constructions. Thus, it is likely that yes/no questions were indicated simply using intonation in Kalinago.

(195)

a. *tikalineti tona*

tikaline-ti tona

abundant-3.sg.m river

‘the river is abundant’

(Breton & Besada 1997:231)

b. *tiseti*

tise-ti

far-3sg

It is far.

(Breton & Besada 1997:231)

tiseti kairapu?

tise-ti kairapu?

far-3sg Roseau?

Is Roseau far?

(Rat 1898:303)

- c. *napaɕiakaya*
 n- apaɕiaka -ya
 1sg- walk.around -PROG
 ‘I am walking around.’ (Breton & Besada 1997:1)

papaɕiaka?
 p- apaɕiaka
 2sg- walk.around
 ‘Do you walk around?’ (Breton & Besada 1997:35)

There are a few instances in the Breton (1665) dictionary where the morpheme *axa*, ‘if’ appears at the beginning of polar questions.

(196)

- a) *axa kanikuwati lane lapuletoni?*
 axa k- anikuwa -ti l- one l-apuleta -ni
 if/Q ATTR- know -3sg 3sg- to write -NOM
 ‘Does he know how to write?’ (Breton & Besada 1997:22)
- b) *axa kaniya kɪrepa?*
 axa kaniya kɪrepa-ni?
 if/Q fruit want-NOM
 ‘Do you want fruit?’ (Breton & Besada 1997:4)
- c) *axa nakamisa yara pupara?*
 if/Q na- kamisa yara b- ubara?
 if/Q 1sg- cloth here 2sg- find
 Have you found my scarf here? (Breton & Besada 1997:40)

Since these are the only three examples it is difficult to say whether this was typically the way polar constructions were formed. There is a lack of definitive evidence for an interrogative

morpheme in these types of questions in later documents and no analog in any of the related languages. In most examples of polar questions, the morpheme *axa* is not present, but use of it may be an optional way to phrase these questions.

4.4.2 Question-word questions

Kalinago interrogative morphemes are free morphemes and are clause-initial. Rat (1898) claims that *kata* is the only interrogative morpheme, but this is incorrect. It is likely that there is a general root interrogative morpheme plus a varying ending vowel, /katV/. Thus, underlyingly, “who” and “what” are not completely different in Kalinago. When used in the context of inanimate objects it is *kate* and when referring to animate objects it is read as “who” *kata*.

(197)

a) *kate piri?*

kate p- iri
what 2sg.poss- name

What is your name?

(Breton & Besada 1997:58, Rat 1898:300)

b) *kate parukuyan yara?*

kate p- aruka -ya yara
what 2sg- look -PROG here

What are you looking for here?

(Breton & Besada 1997:39)

(198)

a) *kata pu?*

kata pu
who 2sg

‘Who are you?’

(Breton & Besada 1997:58, Rat 1898:300)

b) *Kata nhara amulitinu moka?*

kata nha-ara amulita-tinu moka

who 3pl-those ask-3pl pot

‘Who are those (people) asking for a pot?’ (Breton & Besada 1997:58)

c) *kata mutu yahi?*

kata mutu yahi

who person there

‘Who is there?’

(Rat 1898:296)

Other interrogative morphemes are also used, such as *haliya* ‘where?’, *ita*, ‘how’ and *atiri* ‘how many?’:

(199)

halia iatina?

halia ia-tina

where be-1sg

‘Where am I?’

(Rat 1898:296)

(200) *Ita pia?*

ita p-ia

how 2sg-be?

‘How are you?’

(Rat 1898:296)

(201) *atiri paruru puma?*

atiri paruru p-uma

how.many plaintain 2sg-with

‘How many plaintains do you have?’

(Rat 1898:301)

4.5. Imperatives

Imperative sentences use the morpheme –pa, as a suffix on the root of the verb for intransitive verbs.

(202)

a) *emeruwapa*

emeruwa-pa

rest-IMP

‘rest!’

(Breton & Besada 1997:105)

For transitive sentences, an object morpheme, *-i*, is suffixed onto *-pa* :

(203)

a) *keɕepai*

keɕe-pa-i

pinch-IMP-obj

‘pinch it!’

(Breton & Besada 1997:161)

b) *onapurapai*

onapura-pa-i

lower-IMP-obj

‘Lower it!’

(Breton & Besada 1997:198)

c) *rupai uihi luni auli.*

ru-pa-i wihi l-one auli

give-IMP-obj meat 3sg.-to dog

Give the meat to the dog.

(Rat 1898:306)

d) *matikapai liha.*

ma-atika-pa-i l-iha

neg-do-IMP-obj 3sg.masc-that

‘Don’t do that!’

(Rat 1898:306)

There are also two examples from 1665 of the Cariban imperative morpheme *-ko*, but otherwise this morpheme is not productive. These two verbs do not appear with the regular imperfective suffix:

(204)

a) *kaimako*

kaima-ko

go -IMP

go!

(Breton & Besada 1997:53)

b) *hako*

ha -ko

come-IMP

‘come!’

(Breton & Besada 1997:116)

In the next section. I will provide a discussion of language revitalization in a Kalinago context and how a descriptive grammar can aid in language revitalization efforts.

Chapter 5. Conclusion

More research into the Kalinago language is necessary, especially in the area of phonology, which is the hardest aspect to analyze for a language without audio recordings, and for one that was written without a specialized or official orthography. But beyond research for basic science, the Kalinago community would like to attempt to bring back their language. Although Kalinago has not been spoken in over almost 100 years there is growing interest in using the language within the Kalinago community especially within the two main cultural dance groups, Karifuna and Karina. These two groups were founded by Kalinago community members and are important institutions for the Kalinago community.

The cultural groups and its dancers are the most visible representations of Kalinago culture, performing songs and dances for tourists and events throughout Dominica and abroad. They have also made connections and cultural exchanges with Indigenous groups in South America to gain lost knowledge about Kalinago historical dances and songs. They are also the ones responsible for promoting language use in the Kalinago territory. In the past, both groups have organized language activities such as short classes, language clubs, Kalinago spelling bees and naming ceremonies. All are popular, however, these efforts are sporadic and usually short-lived being entirely grassroots, and do not receive any support from the larger Dominican government.

5.1 Revival, reclamation and revitalization

That the Kalinago community is dealing with language loss is not unique. In fact, language loss is rapidly accelerating among many Indigenous communities as elders pass away

and the various effects of colonialism and historical trauma prevent new speakers from being created. However, for many Indigenous communities, their language is either still spoken, or the time gap between when the language was spoken and the present is relatively small. Many communities that are well known for their language revitalization efforts, like Maori, have fluent speakers that can serve as resources in speaking, reading and overall language pedagogy (King 2001). This is not the case for Kalinago, which is dormant.

As language loss accelerates and fluent speakers age and pass away, more communities who desire to save their language will have to confront the many challenges that arise when trying to bring it back from a dormant state, most notably the lack of living, fluent speakers and their knowledge. Already, there are a number of Indigenous communities who face this dilemma, such as the Miami Nation of Oklahoma and Indiana.

One Miami community member, Dr. Wesley Leonard, argues for calling this process of bringing back a language with no speakers, *language reclamation*, and not *language revitalization*. Leonard (2007) defines language reclamation as comprising two linguistic approaches, linguistic reconstitution and language revitalization. Linguistic reconstitution is, “recreating a full language from the existing corpus of documentation” while he defines language revitalization as “creating new speakers and expanding the domains of use for the language” (Leonard 2007:3).

5.2 Creating new Kalinago speakers

Within the community, Kalinago words are still used in greetings and reference to traditional objects such as cooking utensils, dwellings, canoes, and flora and fauna. As stated previously, cultural groups help promote Kalinago language use, although this primarily at the vocabulary level.

Political and economic struggles often monopolize the community's focus, making it difficult to enact a coordinated language revival effort. This is compounded by the fact that Kalinago people, from my own observation and as a member of the community, are generally skeptical, if not distrustful, of promises and efforts made by the government of Dominica to alleviate their economic hardships due to historical and long term mismanagement and broken promises. While there has been a strong governmental push to encourage the use of Kwéyòl, a French-based creole that emerged during the period of slavery, the government does not acknowledge the Kalinago language and there have been no governmental efforts or support for the language.

The lack of any acknowledgement from the government of Dominica is an example of what Truscott and Malcolm (2010) term *invisible language policy*. An invisible language policy is the absence of any formal or official language policy toward an indigenous language. As Truscott and Malcom (2010:14) state,

“Invisible language policy...is associated with the promotion of the language and interests of a linguistically and politically dominant group while giving lip service through visible language policy to the languages and interests of non-dominant groups within the society. This unwritten and indirect form of policy is informed by ideologies which favour social and linguistic mainstreaming and centralized control.”

An example of this is in Australia, where the government has a “de-facto policy of non-intervention,” meaning that no assistance from the government is given. While government funding is available, Indigenous Australian communities are left to their own devices when formulating language revitalizing initiatives (Truscott and Malcolm 2010). In the case of Kalinago, while the government acknowledges Lesser Antillean Creole French (Kwéyòl) as part

of the cultural heritage of Dominica, it does not do the same for Kalinago. Similar to Australia, any language revival or renewal efforts are left up to the community.

Truscott and Malcolm offer as a solution five ways that communities can combat invisible language policy:

- “reassert the rights of Indigenous people to the maintenance of the languages that are important to their lives and culture, as equal members of a wider society which acknowledges plurality and equity”
- “expose the use of public language which can promote exclusivist and invisible language policy at the expense of the interests of Indigenous and other non-dominant groups”
- “question the practices which are supported in whole or in part by invisible language policy and which undermine the interests of indigenous and other non-dominant groups”
- “promote the Aboriginal idea of two-way bicultural education and insist on the resourcing of language education programs which realise it”
- “engage cross-sector support from local government and government departments – particularly from the health and justice areas, among others – professional education organisations, community providers and the media”

(Truscott and Malcolm 2010:17)

The first three points are the most relevant to the Kalinago community/situation. Through the current efforts of the cultural groups, the community can take certain actions such as getting the government to acknowledge the Kalinago language and provide similar support for its use as it does Kwéyòl. Already, community members have started to question why the Dominican government provides hefty support for Independence Day activities and Kwéyòl language activities, but does not provide similar support for Kalinago Week, a weeklong celebration of Kalinago culture in the territory that takes place in the fall. Community members have noted that Kalinago Week events have grown smaller due to lack of funding and organizational capacity and are less likely to be attended by government officials in stark contrast to Independence events. At a broader level, the Kalinago people are used as a marketing tool to attract tourism

and are promoted as being unique to Dominica, but within the marketing there is no mention of the Kalinago language. This is in contrast to the way the Afro-Dominican population are marketed, where the Kwéyòl language is noted as one of Dominica's unique aspects.

Acknowledging the Kalinago people, while not acknowledging the Kalinago language and instead focusing solely on Kwéyòl, forms Dominica's invisible language policy.

5.3 The future of Kalinago language planning

In 2011 I visited the Kalinago Territory in order to present my current linguistic findings based on my research and to get some preliminary opinions on potential language revitalization efforts. During this time, I conducted three immersion lessons at three schools two of which were located on the Territory and one which was off but had a high percentage of Kalinago students. During these sessions students learned vocabulary which they could combine into a number of phrases. By the end of the sessions the students had completely exceeded the sessions' goals. It was heartening to see and the dance groups Karina and Karifuna proposed forming a language council to further language learning efforts.

Most of language revitalization focuses on language revitalization through school programs. Other options usually discussed are Master Apprentice programs (Hinton 2002). Master-Apprentice programs have been successful in producing speakers but these options are not currently viable on the Kalinago Territory. In fact, for dormant languages, the practices that are proven successful, are often not viable in the primary stages of language reclamation and revitalization.

School programs reach the greatest number of children, but require the cooperation of local governments as well as funding (Hinton 2001). Because of the Dominican government's invisible language policy toward the Kalinago language, this may not be feasible. My initial proposal was to focus language revitalization within the cultural dance groups and then expand the spheres of focus to other community domains. Many other communities have used cultural practices such as dance to aid in language revitalization. For example, Hawaiians experienced a cultural revolution during the 1960s around Hawaiian songs and dance, which provided the impetus for Hawaiian language revitalization in the 1970s (Warner 2001). Similar to the Kalinago community, in the Itelmen community of Kovran where there are no more fluent speakers, the Elvel dance group serves as a locus of Itelmen cultural revitalization and leadership (Degai 2016).

In August 2017, I returned to the Kalinago community for a conference and to informally gauge the status of language revitalization. The Karina cultural group was already informally using and teaching Kalinago words and phrases among its members. In this same trip an elderly Kalinago member approached me and stated that he still used some Kalinago phrases with his fishing companions. His son promised to record some of the words and phrases but it has not been done yet. On that visit I also discovered a Kalinago lullaby that was known from one of the cultural group leaders. This song had not been documented previously.

From this trip, I determined that Kalinago community needed to assess the state of the language in the community independent of previous assessments that ignored valuable linguistic knowledge within the community, and then formulate an action plan based on the assessment.

Based on the state of the language, I recommend a plan of action to start language reclamation and revitalization:

1. Assess the true status of linguistic knowledge already present in the community
 - a. Follow standard language documentation procedures (video/audio recording)

Although most sources say the last fluent speaker died in the 1920s, anecdotally, there are few Kalinago members who have mentioned that their elderly relatives knew how to speak Kalinago. This fact combined with the two incidents mentioned above underscore the need for a more thorough and formal assessment of the community's language knowledge and for it to be documented using writing plus video and audio recordings whenever possible.

2. Process already existing language materials in Kalinago and related languages
 - a. Translate materials from French and Spanish into English

English is the main language of use of Kalinago members, and to a lesser extent Kwéyòl, though there are few monolingual Kwéyòl speakers who are elderly. Thus Kalinago material that exists in various languages other than English have to be translated in order for them to be used for any linguistic reconstruction. It is also important that the materials are translated in a culturally appropriate manner. For example, contextualizing Breton's aim as missionary, and not researcher allows community members to understand that his translations might not always be culturally accurate.

3. Refine linguistic materials into a usable form
 - a. Create a more readable orthography
 - b. Create more accessible versions of linguistic research

An orthography that consists of symbols from the International Phonetic Alphabet is not necessarily ideal, as it can create barriers to writing using modern keyboards. It can also be inaccessible to readers who are more comfortable with English and Kwéyòl writing systems.

Although a Kalinago phonemic transcription was developed for this dissertation, ultimately the community should be the guide on how they want to represent their language orthographically, rather than having it imposed by a linguist, even one with heritage in the community.

Additionally, linguistic research must be made accessible to community members. This includes writing linguistic material in a way that is geared toward lay readers instead of privileging academic writing, and making sure community members have physical or digital access to linguistic material.

4. Form a language group / task force

This is starting to be done by the cultural groups, but the efforts need to be properly supported for it to be done consistently. This group should also focus efforts on encouraging the Dominican government to acknowledge the Kalinago language and support language reclamation efforts.

5. Train teachers

Before common programs like language preschools, camps and master apprentice programs can be started, individuals must first be trained in the Kalinago language and then trained on pedagogical methods for language teaching.

These of course, are recommendations, and any plan of action should be formulated in consultation with community members (Warner, Luna & Butler 2007)

Unfortunately, in September 2017, Hurricane Maria devastated the island of Dominica including the Kalinago territory. Although there was no loss of life, some members were injured and a great number were left homeless. Currently, some members still remain in

temporary shelters such as tents. Although I am a member of this community and an Indigenous linguist, my connection to the Kalinago language goes far beyond the data alone and it should for any linguist working with an Indigenous community. Making sure vital needs of the community are safeguarded is also a part of fostering language revitalization.

5.4 Why save an endangered language?

Within almost every discussion of language revitalization the question of why to save the language is also brought up. It is important to point out that underpinning this question is a value judgment on Indigenous languages.

Some critics argue that nothing more should be done for indigenous languages because language death is natural. Nettle and Romaine (2003) term this argument benign neglect-- the idea that languages should be allowed to die in the name of progress. However, this idea does not account for the very unnatural way colonization and oppression caused language death for indigenous people. It ignores the unbalance of power and multi-faceted pressures placed on Indigenous peoples to give up their language. It also ignores the fact that Indigenous people have a right to preserve, maintain, and revitalize their language, and the right to resist language death. As Nettle and Romaine state,

“To choose to use a language, is an act of identity or belonging to a particular community. We believe the choice to be who one wishes to be is a human right. Identity goes beyond the choice of a language or name; it is also an economic freedom” (Nettle and Romaine 2003: 173)

For decades Kalinago people have been told by the wider society that they are extinct or barely surviving as a culture. From observations of school textbooks and conversations with the Kalinago community, school textbooks in Dominica teach about Kalinago people in the past

tense, so that even Kalinago believe that much of their markers of cultural identity have been lost. For the Kalinago community, the Kalinago language is a tangible link to their past, an important marker of the cultural heritage, and away to resist these oppressive pressures.

5.5 Conclusion

In this dissertation I aggregated the various historical Kalinago language data and various linguistic information from related languages to illuminate various linguistic aspects of Kalinago. In the first chapter, I provided a historical background of the Kalinago people, and provided information on Lokono and Garifuna, two Arawakan languages related to Kalinago. I also provided information on the historical written language documentation and the background of those who did the documentation. In the second chapter I provided some phonemic proposals based on Breton's orthography and subsequent written documentation, with evidence from related languages. Chapter 3 highlighted various morphemes in the Kalinago language most notably the discovery of a middle voice morpheme. Chapter 4 provided information on the syntactical structure of Kalinago. In this chapter I've discussed language reclamation in the context of the Kalinago community and how Dominica's invisible language policy hinders Kalinago language reclamation. However, there are steps the community can take to support language reclamation. The work done within this dissertation can provide a start for community members to understand the Kalinago language and to help with more language reconstitution and documentation efforts.

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